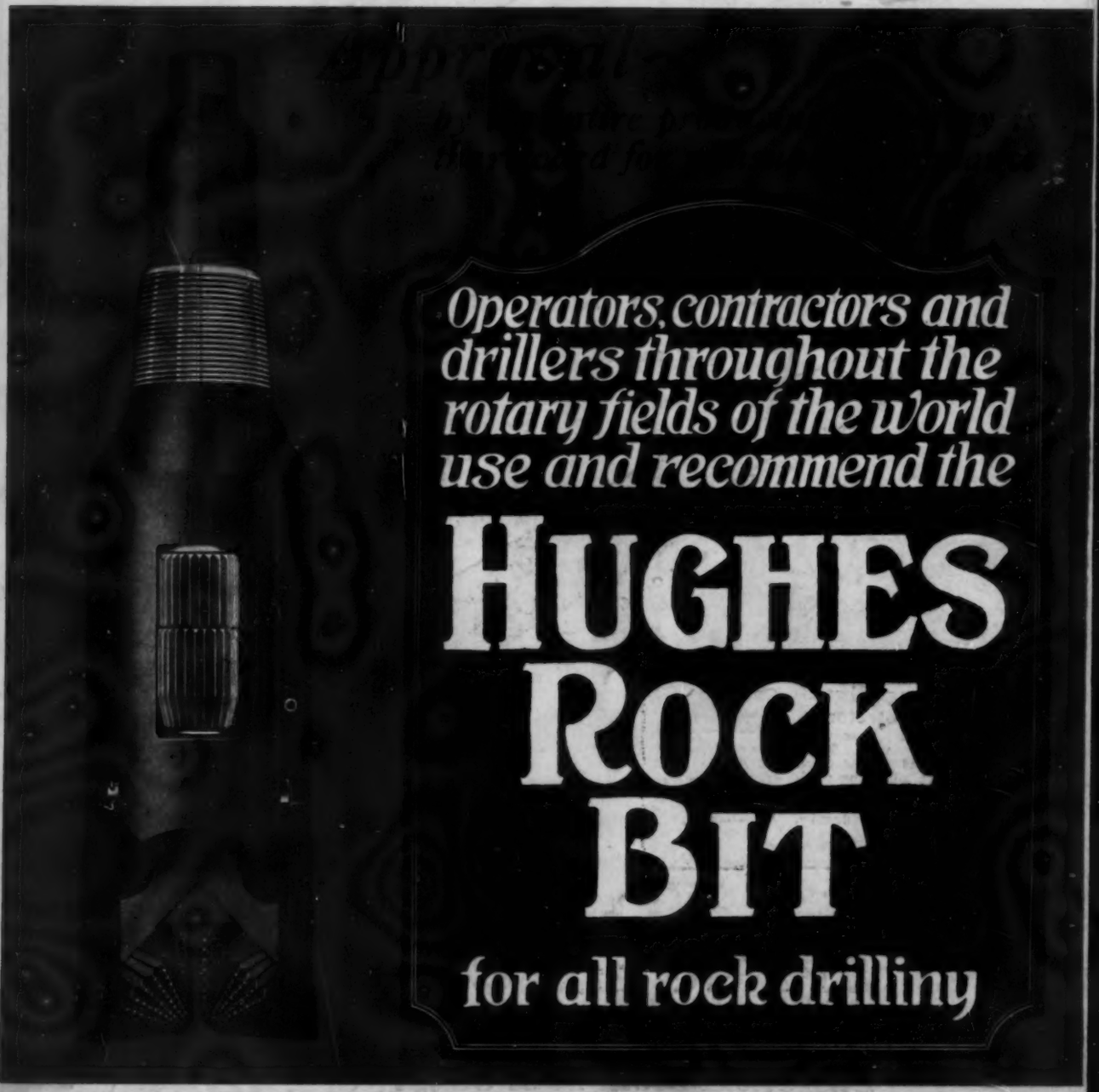
The OIL WEEKLY

10¢ A COPY

March 26, 1926 Volume 41. No. 1


Operators, contractors and drillers throughout the rotary fields of the world use and recommend the
HUGHES ROCK BIT
for all rock drilling

TN860
.05

Preferred by Drillers Everywhere

Spang Jars

Spang Weldless Drilling Jars are giving real satisfactory service in oil fields throughout the world. Wherever the ground formation offers unusual difficulty, Spang Weldless Jars are cutting down the time necessary to complete the hole.

Endless care in manufacture, combined with a tough, strong construction, has resulted in a Weldless Drilling Jar that will outwork and outwear any other drilling jar on the market.

You can buy Spang Jars at over 300 Supply Stores throughout the oil fields. Give them a trial.

Spang Thread Protector

Protect your tool joints with Spang Thread Protectors. Like all Spang products they guarantee absolute satisfaction and long, durable, wear.

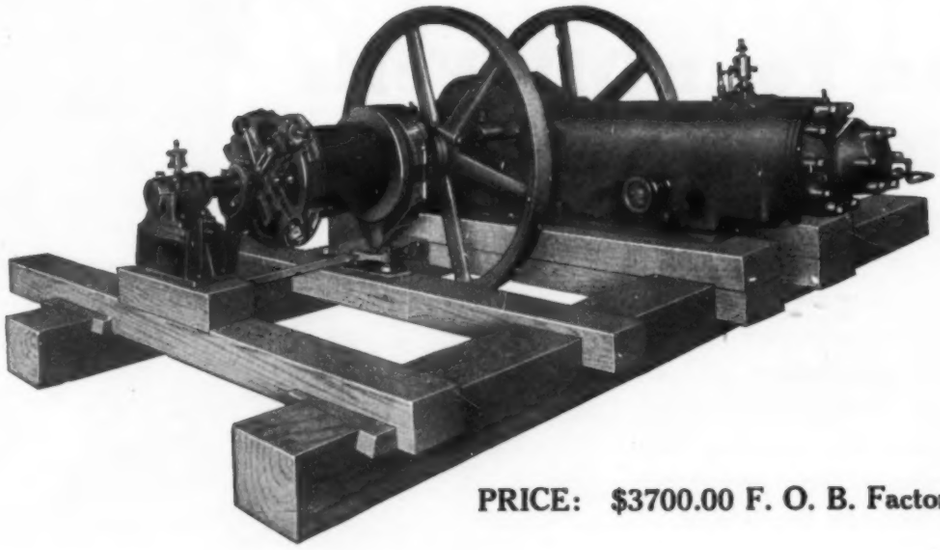
SPANG and COMPANY

Butler **Penna.**

Buy Them From Your Supply Company

The OIL WEEKLY. Issued weekly by the Gulf Publishing Co., 1716 Dallas Ave., Houston, Texas. Subscription price $1.00 per year; 10 cents per copy. Entered as second-class mail matter December 23 1916, at the post office at Houston, Texas, under act of March 3, 1879

Franklin Valveless Oil Drilling Engine For Economy



PRICE: $3700.00 F. O. B. Factory

Costs One Half as Much to Operate as A Ford Automobile

When you realize that it costs one-half as much for fuel, per hour, to drill oil wells with a FRANKLIN VALVELESS OIL DRILLING ENGINE than it costs for fuel for your FORD, it is worthy of investigation.

A light automobile, running thirty miles per hour, will use one and one-half gallon of gasoline. This, at twenty cents (20c) per gallon, costs thirty cents (30c). The average fuel consumption for a FRANKLIN VALVELESS OIL DRILLING ENGINE is about one and one-half gallon of oil per drilling hour, which at eight cents (8c) per gallon, costs twelve cents (12c), or less than one hour.

FRANKLIN OIL ENGINES are convertible for use of gas.

Let Us Send You the Names of Satisfied Users in Your Field

DISTRIBUTED BY:

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NEW MARTINSVILLE SUPPLY CO.
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BRADFORD SALES CO.,
Bradford, Penna.

McEWEN BROTHERS
Bolivar, N. Y.

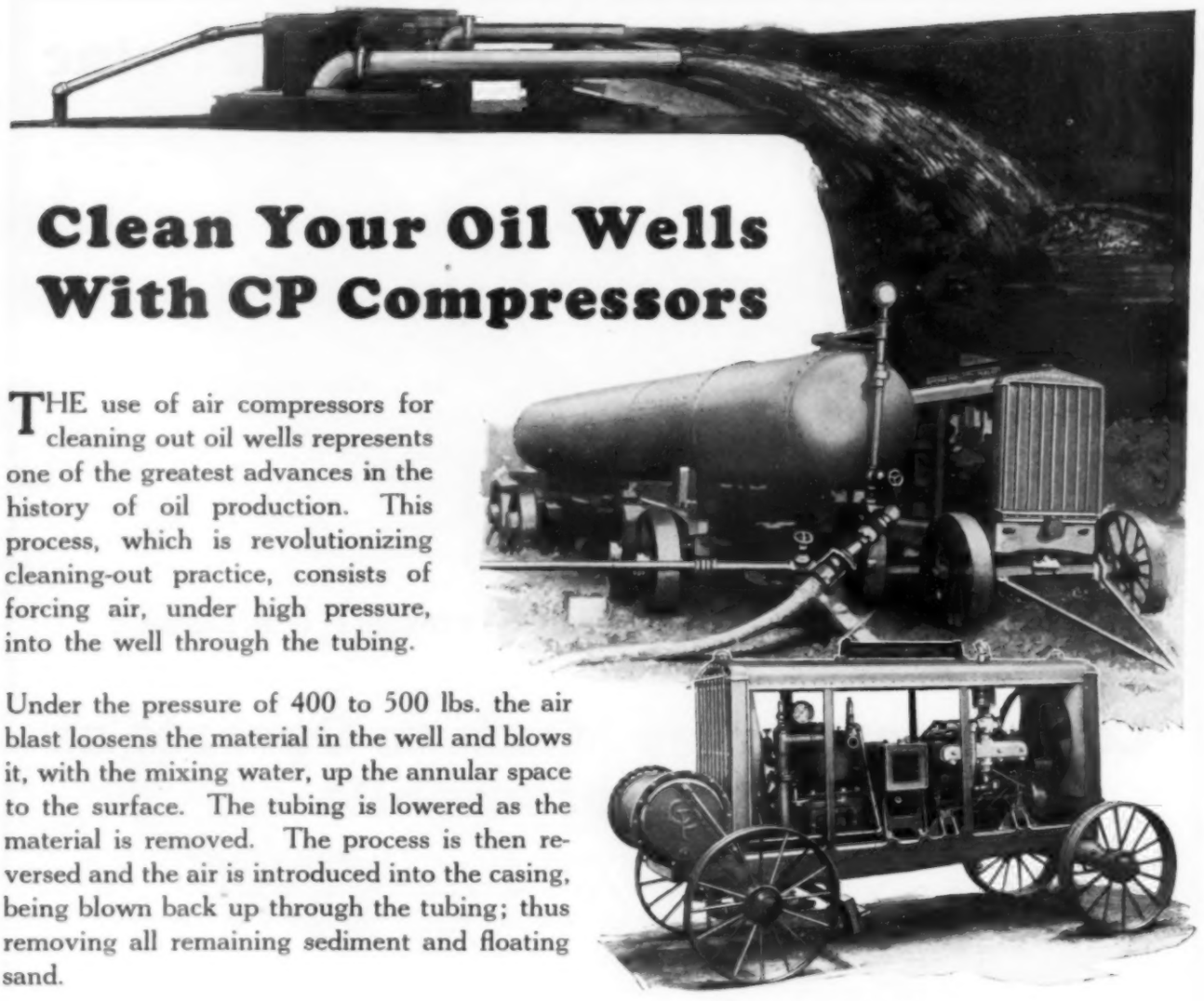
Franklin Valveless Engine Company

Franklin Established 1879 **Penna.**

MANUFACTURERS OF FUEL OIL AND GAS DRILLING, PUMPING AND POWER ENGINES.

CAST IRON WORKING BARRELS.

47 Years of Exclusive, Continuous Oil Field Service



Clean Your Oil Wells With CP Compressors

THE use of air compressors for cleaning out oil wells represents one of the greatest advances in the history of oil production. This process, which is revolutionizing cleaning-out practice, consists of forcing air, under high pressure, into the well through the tubing.

Under the pressure of 400 to 500 lbs. the air blast loosens the material in the well and blows it, with the mixing water, up the annular space to the surface. The tubing is lowered as the material is removed. The process is then reversed and the air is introduced into the casing, being blown back up through the tubing; thus removing all remaining sediment and floating sand.

The Chicago Pneumatic Portable Compressor shown in operation in an Oklahoma oil field has been especially designed for cleaning wells. High pressure and easy portability especially recommend these machines for use on this work, which necessitates moving the cleaning outfit from well to well and field to field.

Figures obtained from wells cleaned with CP Compressors show that these machines clean wells from 8 to 10 times faster than is possible with cable tools, and at approximately 2/3 to 3/4 the cost.

Every well and field presents its own particular cleaning problems. CP Engineers will be glad to discuss the application of CP Compressors to your individual needs.

Chicago Pneumatic Portable Air Compressor. This compressor is a high pressure, two-stage, vertical machine, piston displacement 155 cu. ft. with final discharge pressure of 500 pounds.

C-216

Chicago Pneumatic Tool Co.

Sales and Service Branches all over the World

6 East 44th Street New York, N. Y.

PARKERSBURG
Standardizes on
ALUMINUM PAINT

ALUMINUM PAINT is the latest development in the search for protective paints for industrial uses. The advantages of Aluminum Paint include better protection of metals against corrosion; and an ability to reflect heat rays, with reduced temperatures of the material painted.

Parkersburg Aluminum Paint has been developed and perfected after exhaustive research, study, and tests with other paints of this type.

Parkersburg Aluminum Paint is a *better oil field paint* — and gives *better protection to oil field equipment* than any other paint.

Parkersburg Aluminum Paint has exceptional qualities and abilities to reflect heat rays — with notable reductions in the temperatures of the equipment painted.

Protects Steel Surfaces

A film of metallic aluminum, "leafed" layer on layer (much like fish scales) protects the paint vehicle from exposure to the elements.

Only by extremely slow weathering away of the upper layers of aluminum is the paint vehicle exposed. In protecting the paint vehicle, the surface underneath the paint is likewise protected.

Reduces Evaporation Losses

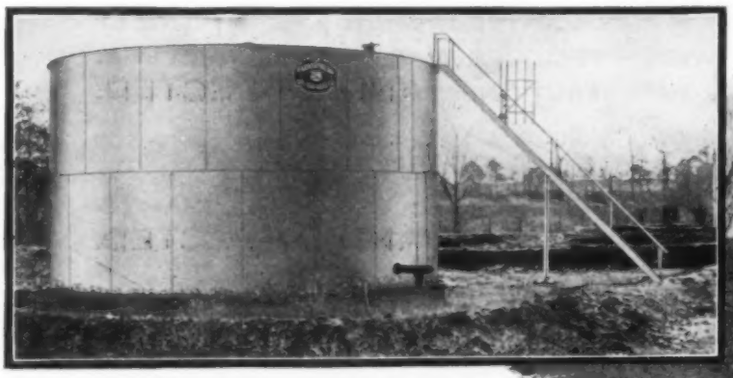
Aluminum is opaque — and has a high reflectivity for light. Because it *reflects* so much light — and *absorbs* so little — the temperature of the paint, and of the material underneath, remains substantially lower than would be the case with paints of less reflectivity.

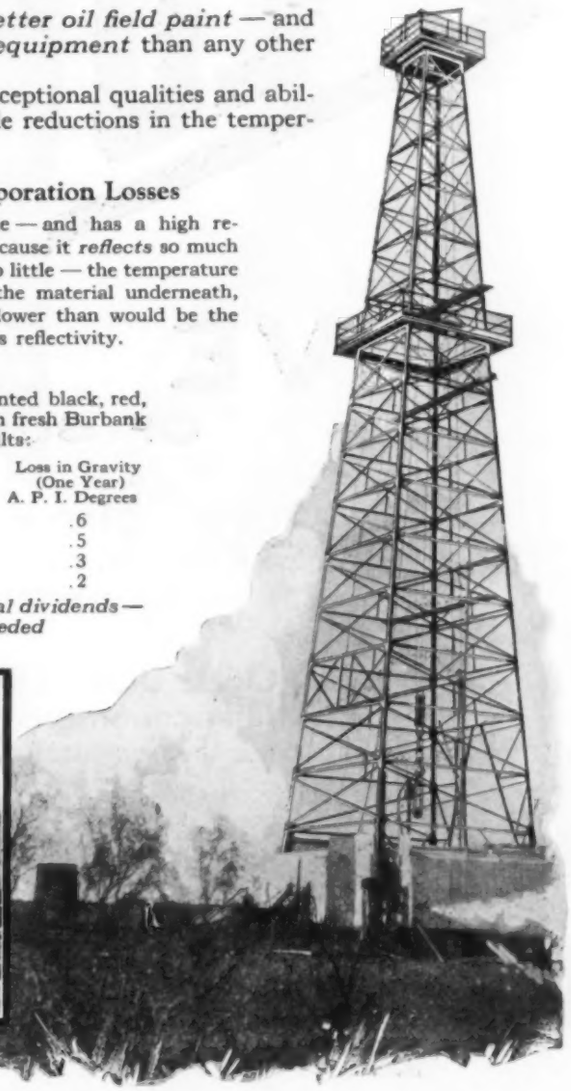
Results of Actual Tests

In a Bureau of Mines test, four 55,000-barrel tanks were painted black, red, gray and aluminum, respectively. Then the tanks were filled with fresh Burbank crude. Careful observations and records show the following results:

Color of Tank	Initial Contents Barrels	Evaporation Loss (One Year) Barrels	Evaporation Loss (One Year) Per Cent	Loss in Gravity (One Year) A. P. I. Degrees
Black	52,058	649	1.24	.6
Red	53,294	609	1.14	.5
Gray	53,192	547	.99	.3
Aluminum	53,418	447	.83	.2

The savings in oil indicated by this test pay increased annual dividends — more than enough to pay for repainting when needed





When you buy Parkersburg aluminum-painted Steel Tanks, Derricks and other Steel Equipment, you buy materials manufactured on a *quality* basis — and protected by the latest process developed through constant research for protective coatings.

The Parkersburg Rig & Reel Company

Main Office and Works at Parkersburg, W. Va.

Say you saw it in The OIL WEEKLY

TOOL JOINTS

FIVE POINTS OF SUPERIORITY

TOOL JOINTS ARE MADE OF HIGH GRADE STEEL SELECTED AFTER CAREFUL EXPERIMENTATION TO INSURE UNIFORMITY IN MANUFACTURE AND SERVICE.

TOOL JOINTS ARE CAREFULLY FORGED UNDER CONDITIONS WHICH PRODUCE A UNIFORM STRUCTURE, FREE FROM FORGING IMPERFECTIONS—**AND INSPECTED.**

TOOL JOINTS ARE ACCURATELY MACHINED SO THAT THERE IS ABSOLUTE INTERCHANGEABILITY OF PINS AND BOXES —**AND INSPECTED.**

TOOL JOINTS ARE HEAT-TREATED BY A METHOD WHICH PREVENTS GALLING OF THREADS, BURSTING OF PIPE ENDS AND DEFORMATION —**AND INSPECTED.**

TOOL JOINTS ARE FINALLY INSPECTED FOR HARDNESS, INTERCHANGEABILITY AND DEFECTS AFTER A THOROUGH CLEANSING WHICH WILL DISCLOSE ANY SURFACE IMPERFECTIONS NOT OTHERWISE APPARENT.

DISTRIBUTORS:
Lucey Manufacturing Corporation of Tennessee:
Mid-Continent General Office and Central Warehouse, Tulsa, Okla., with branches at Tonkawa and Healdton, Okla.

LUCEY MANUFACTURING CORPORATION
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Say you saw it in The OIL WEEKLY

[DUNN TOOLAGRAM]

DUNN SAFETY ROTARY TONGS

OIL WELL DUNN TOOLS

"The Symbol of Safety in Oil Field Practice."

(Patented)

RUGGED SIMPLICITY!

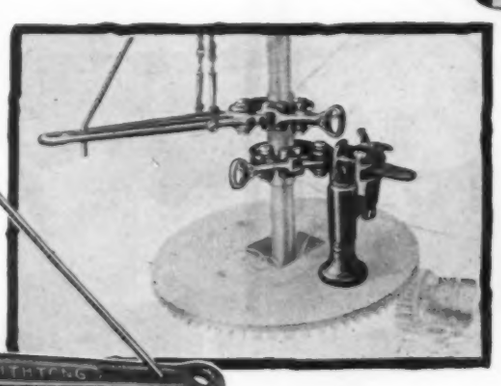
The extraordinary and rugged simplicity of Dunn Safety Rotary Tongs is a result of scientific development properly applied to their design. Note the illustration carefully. When placed on the pipe, the jaw and locking arm automatically assume a gripping position and interlock with the handle. A forward movement of the handle then forces these three interlocking parts to a positive gripping position that can not slip or let go. A reverse movement of the handle automatically opens the jaws, releasing the grip. There is no lost motion. The grip is perfect in circumference on the pipe, eliminating all possibility of crimping or crushing.

DUNN MANUFACTURING CO.
OXNARD, CALIFORNIA

These tongs have a wide range of take-up and automatically adjust to the diameters of pipe, collar, and tool joint, WITHOUT BUSHINGS. The result is an unusual speed in operation at a minimum investment and upkeep. Descriptive folder and prices on request.

NO BUSHINGS
and but few parts

Dunn Safety Rotary Tongs (suspension type) in closed position on pipe

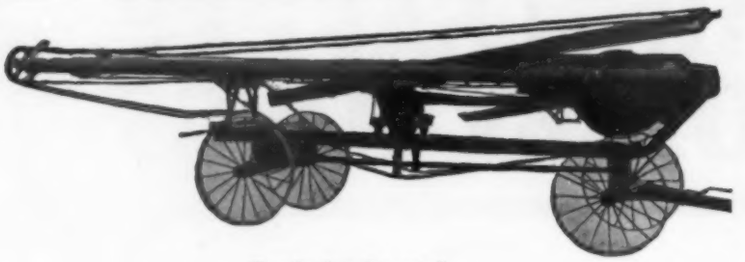


Dunn Safety Rotary Tong in open position

Built in Suspension and Table Types, as shown. Table Type in combination with Suspension Type, as used where it is the practice to break-out with the rotary.

Many Good Dollars

Have been spent for the repair of pulling machines that fell when being raised. More dollars have oozed away through lost production that resulted from wells standing idle while these repairs were being made. Horses are not reliable, ropes and blocks will break, or stakes pull out, resulting in a broken machine and the loss of good hard cash.



Ready for the road

Balances easy

A ONE MAN MACHINE

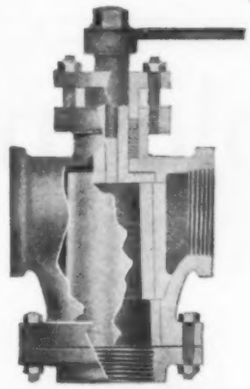
One man sets up an IRON KING unaided, and without fastening a single guy wire. And he cannot pull it over if he tries.

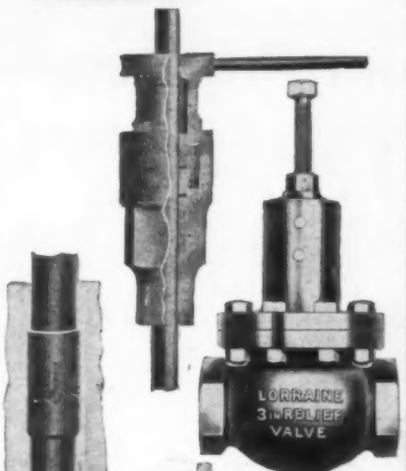
If your oil well supply store will not get you an IRON KING write us direct. Where shall we send you our catalog?

Iron King Manufacturing Co.
Bradner ——— Ohio

He's putting it up

All set





Lorraine Built

Big Dividend Production Men Know Equipment

Otherwise they wouldn't be big dividend producers.

And a good thing about a big man in his success is that he gives credit to whom due. The "big dividend producers" say considerable about

LORRAINE EQUIPMENT

Before being offered, each Lorraine product undergoes the most severe, actual tests, right on the properties of various companies, under all conditions, to determine its merit. When proven worthy, the commercial manufacturing problem is then solved. Lorraine does not experiment with new devices at your cost. That is why Lorraine products dominate in their field. Catalog No. 3 illustrates everything built.

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Manufacturers and Distributors
OIL WELL SPECIALTIES
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Magnolia Petroleum Company

Producer *Refiner* *Jobber* *Distributer*

High Grade Petroleum Products

FUEL OIL

LOADING STATIONS AT

BEAUMONT CORSICANA SABINE GALVESTON FT. WORTH
HARBOR ISLAND LULING CORPUS CHRISTI DALLAS
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MANUFACTURER OF

Magnolene
REG. U.S. PAT. OFFICE

THE DEPENDABLE LUBRICANT

"A Grade for Each Condition

For satisfactory operation of Ford Cars use Magnolene Motor Oil for Fords

REFINERIES LOCATED AT

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General Offices: DALLAS, TEXAS

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Inquiries Respectfully Solicited

SCREENS, PACKERS, SETTING TOOLS, HIGH PRESSURE GREASE GUNS

LAYNE

SWIVELS, NIPPLES, SET SHOES, BACK PRESSURE VALVES, ETC

"Leaders in the Oil Fields of the World"

Layne Products reduce the element of chance in Drilling for Oil

In the development of oil drilling from the hit or miss methods of the "early days" to the highly scientific methods of today, the Layne & Bowler organization has played an important part.

Layne Patents are the result of more than 30 years experience in solving oil development problems. Out of this experience, through constant study (for 25 years in actual contact with the Gulf Coast and California oil fields) we have developed equipment designed to eliminate substrata hindrances to successful oil production; equipment that reduces the element of chance in drilling for oil to the minimum.

Write for Descriptive Literature

The Layne & Bowler Co.
HOUSTON, TEXAS

Say you saw it in The OIL WEEKLY

G-E Arc Welders—In Oil Fields and Refineries

This G-E Portable, Buda Engine-Driven Arc Welder is used on countless repair and construction jobs in oil fields and refineries.

In oil fields: Haul it with a tractor to wherever the job may be and set it to work on repairs or on the construction of pipe lines and storage tanks.

In refineries: Move it quickly from place to place, now constructing, now repairing, now salvaging all types of tanks, piping, and other equipment.

In both fields of work the job is done faster, the job is done better, the job is done with impressive savings. Welded construction of pipe lines will often save 25% of the cost of coupled construction, while the welding of storage tanks prevents leaks which cause an annual loss of 5% of the stored product.

Learn more about this G-E Welder, its applications in oil fields and refineries, and the savings effected by its use. Write to your nearest G-E sales office for publication GEA-9.

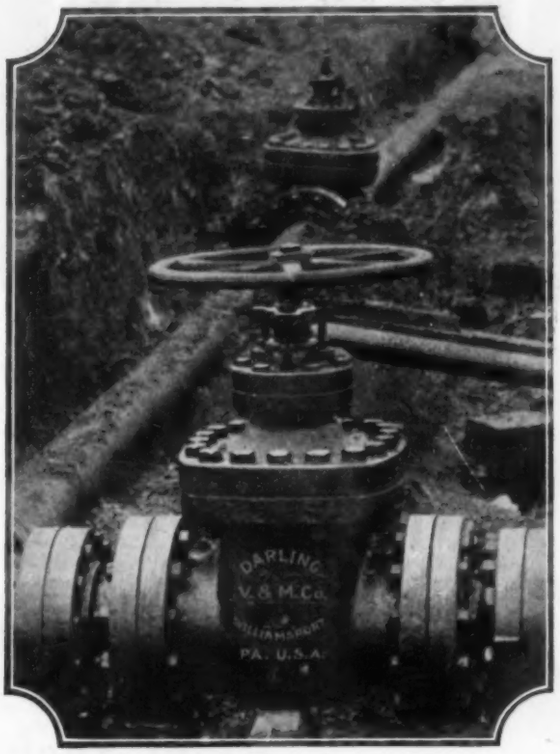
G-E Motor-driven Welders are also furnished and used in oil fields and refineries. Ask for bulletins.

28-18

GENERAL ELECTRIC

GENERAL ELECTRIC COMPANY, SCHENECTADY, N. Y., SALES OFFICES IN ALL PRINCIPAL CITIES

Say you saw it in The OIL WEEKLY



Easy to Operate —but Always Tight

If a valve operates with difficulty, permitting a small volume of oil to pass through, it means expense in repairs and delay in getting into production, loss of oil and wages paid for unproductive work.

DARLING

Darling Gate Valves cover all the points required for a perfect valve, regardless of the severity of service. They last for years—they seldom need repairing or replacing. And in spite of their ease of operation, they always stay tight.

The tests we insist upon giving **all** Darling Gate Valves, regardless of type or size, before they leave our factory, are far more severe than the service they will meet. **Every** Darling Gate Valve is tested at its rated pressure and held under this test pressure until inspection is completed. It is our assurance of their uniform high quality.

Construction details will be gladly sent to those interested.

By Invitation Member

DARLING VALVE & MFG. CO.

Williamsport, Pa.

New York Chicago Oklahoma City Houston

Mid-Continent Distributors:

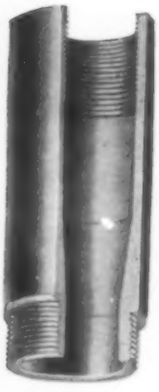
Frick-Reid Supply Co. Atlas Supply Co.
International Supply Co. Petroleum Supply Co.

California Distributor:
Petroleum Equipment Company, Los Angeles

DARLING GATE VALVES

ANNOUNCING

THE GUIBERSON MULTIPLE SUCKER ROD SOCKET



"Eight Sockets in One"

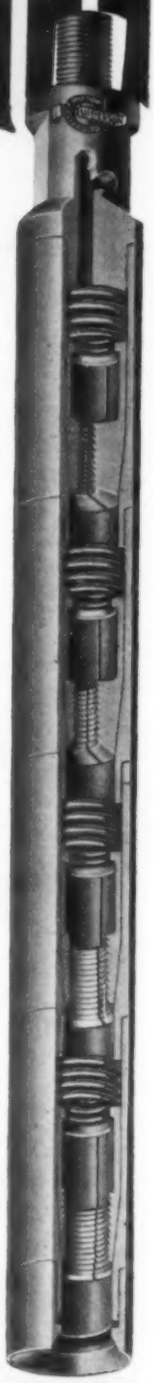
After exhaustive field tests, this Sucker Rod Socket is offered the producer as a wonderful time and money saver on all Rod jobs, for it provides the right size slip and bowl whenever run after dropped or broken rods. No need to pull out and change bowls and slips. All necessary sizes of bowls and slips are run down the hole together, and the protruding point of the rod, be it box, pin or rod, picks out its complementary socket and is caught.

Slips are one piece, three forked, so they can not be lost in the hole; while they are an integral piece, they are so cut that they resemble three individual slips in action and are therefore spoken of as a "set of slips."

The Socket consists of a Top Connection, a series of four Shells each containing a spring and slip, and, at the bottom, a Bowl. Each set of slips has an individual spring and is capable of taking at least two sizes of rods or boxes.

Each Shell is interchangeable with any other. Each set of Slips fits into any Shell. This insures quick replacements. Mechanical details have been worked out in an ingenious way which would make you enjoy reading our descriptive folder.

Any kind of rod trouble can be handled with the GUIBERSON MULTIPLE Sucker Rod Socket. Insist on seeing it.



THE GUIBERSON CORPORATION

Box 1106, Dallas, Texas

CALIFORNIA BRANCH: 1506 Santa Fe Ave., Los Angeles

402 W. First St., TULSA — 318 First Nat'l Bank Bldg., HOUSTON — 506 Trust Bldg., NEWARK, O.

GUIBERSON

BETTER BE SAFE THAN SORRY

As Wildcatting Increases Bridgeport's Worth Is Shown

During periods such as the one now developing in the petroleum world, Bridgeport tools gained their reputation. Strengthened for deeper drilling and improved as field work has suggested, with several new tools added, again they are meeting the demands of a new day.

The Test of Oil Field Tools

The old days are past when poor material can be shaped into crude tools for successful oil field use. Such tools "got by" in shallow wells of yesteryear.

But with wells today approaching a mile in depth, they are obsolete.

Bridgeport tools are manufactured to meet the new conditions. They are sold by the supply houses and the Bridgeport branches located as follows:

Wichita, Kans.	Stroud, Okla.	Pawnee, Okla.*
Russell, Kans.*	Depew, Okla.	Ranger, Tex.
Gorham, Kas.	Wetumka, Okla.	Panhandle, Tex.*
Eldorado, Kans.	Tonkawa, Okla.	Breckenridge, Tex.
Winfield, Kans.	Garber, Okla.	Marietta, Ohio.
Tulsa, Okla.	Braman, Okla.*	

A complete stock of contractors' supplies carried at points indicated by a star.

THE BRIDGEPORT MACHINE COMPANY

General Offices & Works WICHITA, KANSAS

On the Battlefields of Rust — Reading Wrought Iron Pipe will Win

① *Alkaline Soil*
② *Marshy Bogs*
③ *River Crossings*
④ *Salt Water*

EVERY pipe line of any importance passes through one or more of these "battlefields of rust," and meets there the most destructive forces of corrosion.

If initial cost prevents an entire line of Reading Genuine Wrought Iron Pipe, at least protect your investment by specifying Reading for these vital spots where only Genuine Wrought Iron, with its marvelous rust-resisting properties, can win the battle.

READING IRON COMPANY
READING, PA.
World's Largest Makers of Genuine Wrought Iron Pipe
OIL WELL SUPPLY COMPANY, Distributors
Inquire at any of their 100 Branches

READING PIPE
GENUINE WROUGHT IRON

CAST-IRON WORKING BARRELS

Made with the Trueness and Precision of Gun Barrels

"Inspection" in the army may be a period of fear and trembling, but it is positively lenient compared to working barrel inspection at the Jarecki plant.

Jarecki inspectors have a single message for barrels that aren't perfect in every detail—close-grained, glassy-smooth on the inside and absolutely true throughout. That message is: "They shall not pass!"

One large interest has more than 15,000 Jarecki Cast-Iron Working Barrels in use. Can you think of any stronger proof of unvarying and uncompromising *quality?*

You will find Jarecki Cast-Iron Working Barrels in stock at nearest Jarecki store.

"We Sell Everything Used or Needed About an Oil or Gas Lease.

Jarecki Crumbie Tongs
Handles of hand-forged steel.
Bits of hardened steel.
Heavy air-furnace malleable iron jaws.
Unhesitatingly guaranteed.
At your Jarecki store.

Jarecki

MANUFACTURING COMPANY
ERIE, PA., U. S. A.
St. Louis Pittsburgh El Dorado Tulsa Eastland Lawrenceville

The Standard Collapsible Rotary Drill and Core Barrel

for Efficiency Reliability Rapid Drilling

THE Standard Collapsible Rotary Drill and Core Barrel are rugged, dependable tools that "make hole" faster regardless of the formation encountered.

With them you save from 25 to 40% of the cost of old style drilling.

Write for descriptive literature

O. M. CARTER

W. T. HILTPOLD, Sales Agent
206 Scanlan Bldg. Houston, Texas

Three Simple Precautions That Insure Longer Service

A FINE oil well line deserves good treatment. The life of the best can be needlessly shortened by abuse. Wickwire Spencer lines represent the best that long experience and careful manufacture can produce. Three simple precautions will insure your obtaining the full saving and satisfaction resulting from their superiority.

1. Before using a line run it a few times without actual work to let it "get set."
2. Apply loads gradually. A sharp stress which suddenly throws a greatly increased burden on the line hastens its deterioration.
3. Lubricate frequently. Rust is a greater enemy than usage.

Wickwire Spencer Steel Company

General Offices:
41 East Forty-Second Street, New York

Distributors:

EASTERN OIL FIELDS

Slicker Pipe & Tool Company, Knox, Pa.
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L. J. Cummins, Oil City, Pa.
Lloyd Smith Company, Bradford, Pa.
McDonnell Brannen Co., Bolivar, N. Y.
H. B. Mitchell Company, Emlenton, Pa.
J. S. Young, Jr., Lawrenceville, Ill.
G. A. Blair & Sons, Clintonville, Pa.
New Martinsville Supply Co., New Martinsville, W. Va.
Elms Brothers, Waynesburg, Pa.
Penn Pipe & Supply Company, Sheffield, Pa.
Leidecker Tool Company, Marietta, Ohio
Wooster Tool & Supply Co., Wooster, Ohio

MID-CONTINENT OIL FIELDS

Murray Tool & Supply Co., Tulsa-Cleveland, Okla.
Federal Supply & Machine Co., Augusta-Winfield, Kansas.
Atlas Supply Company, Fort Worth-Vernon-Panhandle, Texas.
Norvell-Wilder Hardware Co., Beaumont-Houston, Texas and Shreveport, Louisiana.

ROCKY MOUNTAIN OIL FIELDS

Great Northern Tool & Supply Co., Kevin, Montana.
Midland Iron Works, Billings, Montana.
Leidecker Tool Company, Casper, Wyoming.

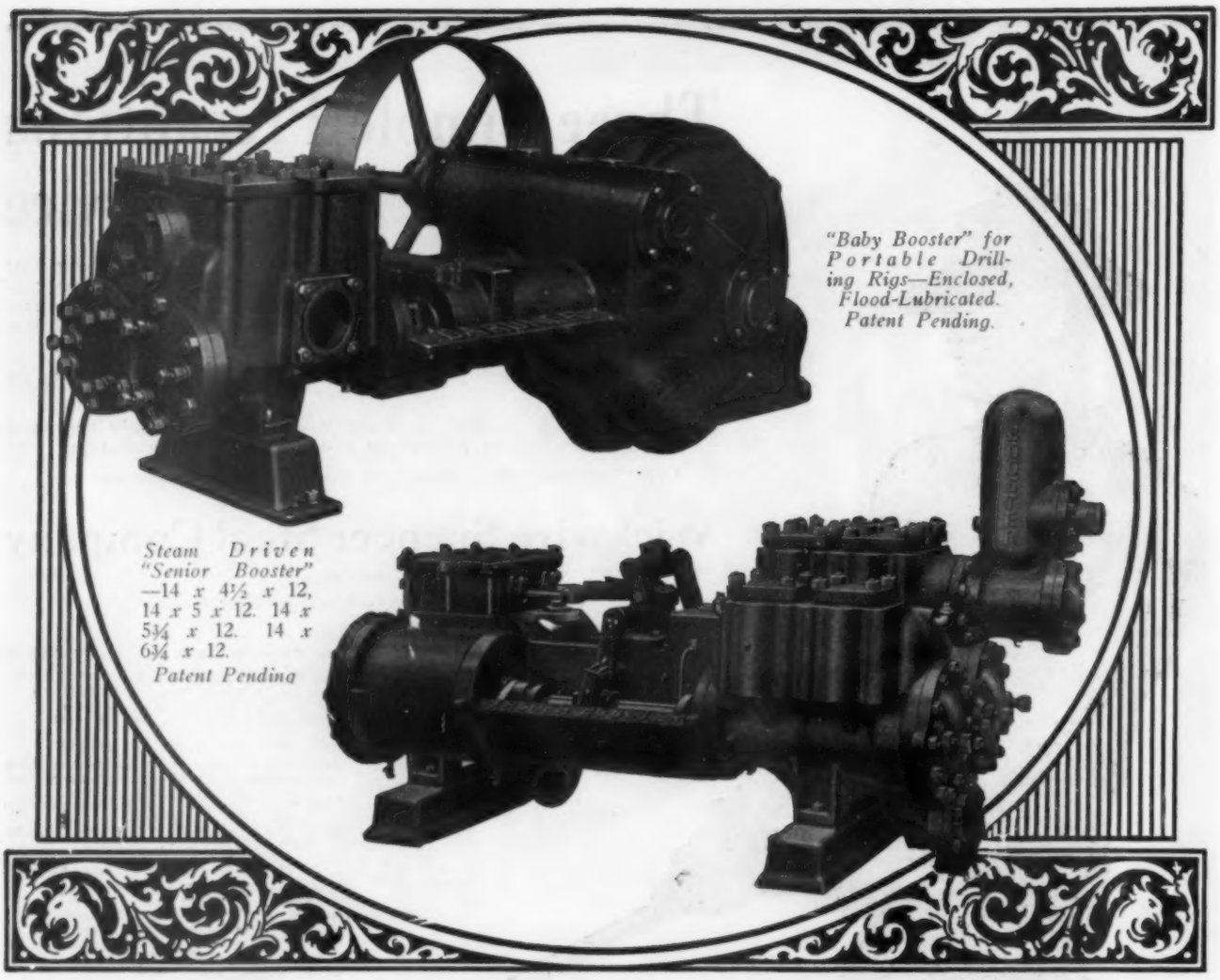
CALIFORNIA OIL FIELDS

E. B. Wiggins, Los Angeles, Calif.

WICKWIRE SPENCER PRODUCTS

WICKWIRE SPENCER STEEL

Say you saw it in The OIL WEEKLY



"Baby Booster" for Portable Drilling Rigs—Enclosed, Flood-Lubricated. Patent Pending.

Steam Driven "Senior Booster" —14 x 4½ x 12, 14 x 5 x 12. 14 x 5¾ x 12. 14 x 6¾ x 12. Patent Pending

COMPLETE GARDNER REPAIR STOCKS MAINTAINED IN ALL FIELDS

Insuring Prompt Service

Every operator using GARDNER Pumps has the advantage of a nearby source of supply for repair parts as stocks are maintained in all fields. GARDNER parts are interchangeable, and replacements can be made with absolute assurance that new parts will fit. Be sure to get genuine GARDNER parts by purchasing from the following distributors.

Territory Available to Agents

"Quality Builders for Over 65 Years"

THE GARDNER GOVERNOR COMPANY

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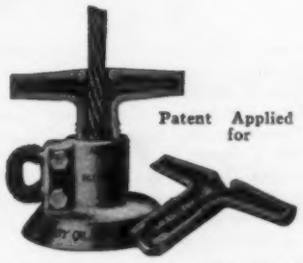

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MAR 29'26 © Cl B698266

As spring weather approaches along the Tamesi River at Tampico

The OIL WEEKLY

March 26, 1926 **Volume 41, Number 1**

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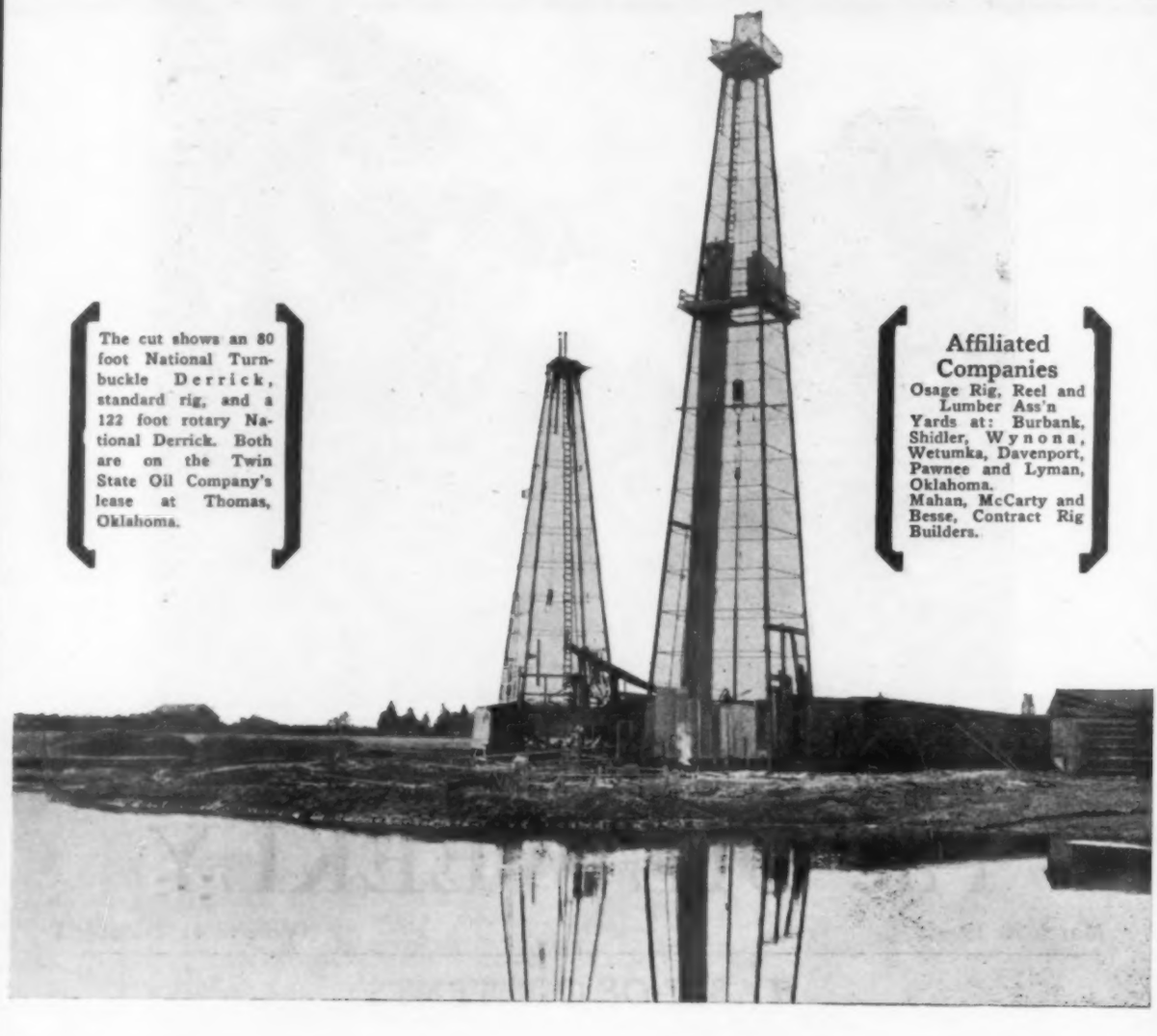

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NATIONAL TURNBUCKLE DERRICKS

Panhandle Will Have Ample Storage And Line Capacity

Tanks and pipe lines now building will be completed within 60 days

By H. H. King
Staff Representative

Amarillo, Texas. — Ample facilities for the handling of the impending peak crude production from the Hutchinson County field is practically assured by the three six-inch, two eight-inch and one four-inch oil lines now in operation, or under construction from the field proper to tank car loading racks at distant railroad points, while approximately 2,500,000 barrels of steel storage facilities will be available for temporary excess production. Heretofore, the problem of handling the crude and marketing same when produced has been given grave consideration by individuals and companies holding leases and those planning to enter the field, but within 30 days the present over production will cease, and the more recent pipe lines and tank farms projects will be available for service within 60 days.

The initial tank building program launched by six producers, carriers and purchasers to accomodate future production from Hutchinson and adjoining counties involves slightly more than 2,000,000 barrels of tankage, while about 500,000 barrels of facilities are already available in Carson and Hutchinson Counties. The companies participating in this new tank construction work are listed in the accompanying table, and all have made provisions to enlarge their facilities on short notice should the occasion arise.

The six-inch pipe line being operated from the field to skimming plant at Amarillo by the Pantex Pipe Line Company and the four-inch line from the field to skimming plant and tank car loading racks at Panhandle by the Plains Pipe Line Company will be supplemented shortly by the Magnolia Pipe Line Company's six-inch line to the tank farm and rack at Kings Mill; Marland Pipe Line Company's eight-inch line from north Hutchinson County to Panhandle, thence to Claude and Ranger when pdrouction justifies. The Plains Pipe Line Company is completing a six-inch parallel with its original four-inch carrier. With the exception of Magnolia, all of these carriers will be within esay reach of three separate railroads for making deliveries of crude by re-shipment in tank cars to market. Gulf's line is scheduled to be in operation as far as the town of Panhandle within 40 days. Gulf is constructing four 80's on a 160-acre tank farm, located in section 8, two miles due east of Panhandle.

Amarillo, Texas.—The leading operators and crude purchasing companies in the Carson-Hutchinson County section of the Panhandle district have started a tank building campaign to store crude in the field and to handle all future oil produced in excess of transportation facilities. The following companies are building tankage:

County; Company	No. Tanks	Capacity in Bbls.
Carson—		
Gulf Pipe Line Co.....	4	80,000
Marland Pipe Line Co.....	2	55,000
Hutchinson County—		
Gulf Pipe Line Co.	2	55,000
Marland Pipe Line Co.....	6	55,000
Phillips Petroleum Co.....	10	55,000
Plains Pipe Line Co.....	3	55,000
Skelly Oil Co.	6	55,000
Gray County—		
Magnolia Pipe Line Co....	2	55,000

Posted Schedule

The scale of gravity prices introduced November 16, 1925, and given an upward revision in prices February 1, making 40 gravity crude and above at $1.70, by the Kay County Gas Company (Marland crude buying agency) apparently will be adopted by all the major buyers in the Carson-Hutchinson County area. Magnolia posted a similar price schedule last week, while Gulf will fall in line when its gathering system is placed in operation next month. The Amarillo Refining Company, which is receiving crude from the field via the Pantex line, is paying three-fourths of the Mid-Continent gravity scale price for crude at the well. The remoteness of the Panhandle district from the leading market centers is largely responsible for this crude price penalty being forced upon them by the crude buyers.

New field work in Hutchinson County is registering a gain each week, but current production is not mounting in proportion, partially due to lack of facilities in handling the oil produced. The county is credited with having averaged 5230 barrels daily during the past week, as compared to 5450 barrels daily one week previous. A survey of field operations in Hutchinson County at the close of last week follows: 65 active tests drilling or in process of completion; 46 rigs and derricks; 14 locations, and 10 tests shut down for various causes, making a total of 135 operations listed, or five more than the week previous.

Gulf's E. Cockrell 1, located in the northwest corner of the south half of section 3, extended the Hutchinson County field several locations to the southeast early this week swabbing 15 barrels during the first 10 hours at 3032 feet. This well is not completed, and will be deepened for a shot in the sandy-lime pay. The Summit Oil Company's Smith 1, which was reported as a flowing well last week, is making 480 barrels natural from regular sandy-lime pay at 2932-89 feet. This well is to be deepened and given a shot as soon as storage is available.

H. F. Wilcox-Pampa Oil Company's Worley-Reynolds 2, located in the Wilcox pool, Gray County, is holding at 500 barrels natural after being shot recently in granite wash pay at 2861-93 feet, although some cavings remain in the bottom of the hole.

Carson and Moore Counties each scored dry gasser completions during the past week, and both wells were in hard granite when drilling ceased.

The Western Carbon Company has taken a five year lease, with renewal privileges, on a 68 acre tract in section 127, straddling the Carson-Hutchinson County line from the Burnett estate for the construction of the largest carbon black plant in Texas, and incidentally the first for the Panhandle oil and gas field. This concern has been assigned the carbon black permit obtained several months ago by the Phillips Petroleum Company from the Texas Railroad Commission, and will build a plant immediately to burn 50,000,000 cubic feet of residue gas from Phillips' natural gasoline plants in Carson and Hutchinson Counties. This carbon black plant and equipment will represent an investment of approximately $1,000,000 when completed.

R. J. Sharpe, formerly district representative of the General American Tank Car Corporation at Tulsa, has been appointed general sales manager of the company with headquarters at the general office, 230 South Clark St., Chicago, effective April 1, Mr. Sharpe, will be succeeded by J. V. O'Neil.

Progress of Safety Work Reviewed In Houston Meeting

Second annual gathering of safety council has instructive papers presented

By A. R. McTee
Staff Representative

Houston, Texas.—Growth of the safety idea in its relation to oil field work was seen here recently in the Second Annual Convention held by the Petroleum Safety Council of the Mid-Continent Oil and Gas Association, in conjunction with the Petroleum Section, National Safety Council. The meeting ended Saturday, March 20, after a successful two-day session attended by representatives of all the major companies operating in the Mid-Continent and Gulf Coast.

Interest in the meeting centered around the papers read, each of which contained valuable contributions to safety thought. Coming as these papers did from men actively engaged in the oil business, they carried weight of authority beyond that often found in remarks on the subject of safety.

W. S. Farish, president of the American Petroleum Institute and head of the Humble companies, brought inspiration to the gathering through his paper, "Safety, a Factor in Modern Industry."

Tracing the development of welfare work in industry, Mr. Farish said: "The ideal conditions today around any industrial plant are well built, comfortable homes, happy surroundings and all of the comforts and necessities of life that go to make living worth while. We are seeing that development progress from year to year.

"All of us can look back a few years to the oil field work when if we had to answer the personal responsibility for conditions there, there is not a one of us who would not blush with shame, largely due to the fact that the oil field work was transient in character, not permanent, and there was no justification for considerable expenditures to make living conditions comfortable. But today it is better. Large companies are spending considerable money and time and effort to improve living conditions."

Obligations to Men

This effort is not confined to living conditions alone, the speaker pointed out, and as related to the specific problem of safety, he stated: "Going further than the living conditions, I will say goes the obligation of safety. I don't think we have the right to indulge in the character of work that modern industries indulge in—and machine operations generally have millions of hazards—unless we also assume the obligation to do everything in our power to minimize the risk that the men engaged in the work have to take and indulge in. As a driller and well contractor in days gone by, I considered it my obligation not to ask a man working for me to take any risks that I personally would not take, and I think it ought to hold good right down through the line. We have no moral right to ask anyone in our employ to take a risk which has not been protected in every possible way by the management."

It was also emphasized by Mr. Farish that safety to be effective must start with the executives. "I am convinced," he said, "from my contact with the men who have the prime responsibility of executive management that their heart is in the right place, their intentions are right, and none want work carried on unless employees get the very best safety protection. And the only way we are going to see that it is done right is for constant pressure to be brought upon the executives, and for constant effort, then, on his part to get the idea down through his ranks."

"Safety of Nation's Workers"

In the absence of W. H. Cameron, managing director, National Safety Council, Chicago, Illinois, his paper devoted to "The Safety of a Nation's Workers," was read for him. He outlined the growth of the safety movement, presented interesting statistics on deaths from accidents last year, and summarized the purposes of the safety movement.

"Methods a Producing Company May Employ," read by C. L. Swim, safety director of the Skelly Oil Company, Tulsa, brought forth more discussion and as much interest as any paper presented. Mr. Swim's efforts toward safety in the Skelly organization have been fruitful. His paper reflected a deep understanding of the safety problems. He called attention to the advantages a safety engineer has when his work is confined to concentrated properties such as refinery, in contrast to the same work extending over several producing fields. "The basis of safety work," he said, "is education, and its results are cumulative."

A number of methods used by companies to encourage safe working practices among employes were mentioned: Some organizations find a safety flag good to encourage the competitive spirit among the men. A flag is put up in a conspicuous place about the field or plant on the first of the month and stays up until some accident happens. The working force is generally divided into units, each unit responsible for keeping the flag up as long as possible. Cash prizes have been found effective by other companies. The unit or group having the best accident record over a set period of time is given a cash prize by the management.

These methods are solely to keep up the interest in safety, and are mere details in any safety program, Mr. Swim stated. The fundamentals of safe working practices have to be realized by the men individually, and constantly impressed by the foremen.

Encouragement of Safety

The importance of the foreman in encouraging safety cannot be overestimated. Many instances were cited to show the results of having a foreman who is sold on the safety idea. The speaker declared that the experience of his company proved to him conclusively that the foreman is the key to successful safety endeavor. He pointed out a case where the removal of a foreman from a district that had successively shown the highest percentage of accidents of all the other districts, brought that district to first place in the list of those with few or no accidents. This change was accomplished by putting in a man who insisted on employees following the safety rules laid down by the company.

The value of safety organizations within oil companies was brought out by H. J. Morgan, Marland Oil Company, who did not appear on the program officially, but explained Marland's safety organization in one of the discussions following Mr. Swim's paper. Mr. Morgan said that attendance at the safety meetings was compulsory in the Marland company, that these meetings were held every week in the various territories, and that the men answered a roll call or sent in an excuse. The district superintendent is held responsible for his men being at the meeting.

George Hannum, of the Mid-Continent Petroleum Corporation, Tulsa, also stressed the importance of the foreman, in the discussion brought on by Mr. Swim's paper. Mr. Hannum

related a recent incident that happened in his company where an experienced boy lost several of his fingers while operating a gear pump to furnish water on a wildcat rig. The foreman who employed the boy took the responsibility for the accident, saying that he had not gone over the hazards of the job with the boy when he hired him. Holding the foreman responsible for accidents that happen to the men working under him helps in getting the proper co-operation from foremen in carrying out safety rules.

First Aid Training

First Aid as taught to oil field workers by the United States Bureau of Mines was discussed by H. C. Fowler, of the Bartlesville branch of the Bureau of Mines. He described the field trips made by the safety cars operated by the bureau, and explained that these cars are supposed to give demonstrations in the oil fields and certain designated ones will go to companies requesting them, provided a sufficient number of employes will take the training.

Following Mr. Fowler's talk, E. D. Murphy, safety engineer, Mid-Continent Petroleum Corporation, Tulsa, read a paper on "The Value of First Aid Training to Employees. He cited the instance where two men's lives were saved at the West Tulsa refinery of the Mid-Continent Company, since the first of this year, by employees who have had the training given by the Bureau of Mines, and stated that it is now the plan of his company to have every employee take the training as soon as it can be obtained.

Interesting statistics were given by Ray E. Miller, safety director, Petroleum Safety Council. He stated that at least 50 per cent of all accidents on which the council has had information are caused by the improper use of hand tools and materials, and that only about 10 per cent involve machinery of any kind.

Following Mr. Miller's remarks, there was an important discussion on the value of safety rules being enforced. A common cause of fatal accidents around oil properties is carelessness in repairing gas engines. A number of experienced gas engine men have been killed because they reached through the engine fly-wheel to adjust the Wico with the ignition switch still on. Prairie Oil and Gas Company has in effect a rule that any man working on a gas engine without first turning off the ignition switch will be discharged. It was generally conceded that every company should have such a rule and enforce it to the last letter.

Dr. H. B. Trigg, Fort Worth surgeon, discouraged the practice of first aid being administered by untrained persons, saying that the untrained often do things that result in serious and fatal results because of ignorance.

Ralph Banister, safety engineer, Gypsy Oil Company, Tulsa, gave a paper called "Good Housekeeping," in which he discussed the possibilities of cutting down accidents by keeping all properties in order.

Necessity of a better understanding of safety from the viewpoint of the state official was urged by Hon. Claude E. Connally, Oklahoma commissioner of labor, in his paper entitled, "Safety Laws." He stressed the importance of the right kind of inspectors being employed by the states, and declared that the ideal arrangement would be that of putting these inspectors under civil service regulation, thereby insuring their continuity of service as long as they proved themselves efficient.

He concluded his paper with the statement that the safety problem will be solved through the elimination of accident hazards with education.

In summarizing the results of the meeting, Henry W. Boggess, president of the Petroleum Safety Council of the Mid-Continent Oil and Gas Association, expressed his appreciation of the co-operation being given by the many oil companies in working with the council, and expressed the hope that more companies would see fit to join the council this year.

Officers elected for this year included H. W. Boggess, former president, re-elected; W. B. Pyron, Houston, vice-president; Harry H. Smith, Tulsa, treasurer, re-elected.

State directors were chosen as follows: For Kansas, J. S. Gibson, of Independence; for Oklahoma, Clay Briggs, of Bartlesville; for North Texas, C. A. McDaniel, of Dallas; for South Texas, E. B. Wood, of Houston; for Louisiana and Arkansas, M. A. Tracey, of Shreveport.

Ray E. Miller of Tulsa, Oklahoma, was re-elected managing director of the Petroleum Safety Council.

Texas Commissioners Guests at Banquet of Texas Oil Men

Houston, Texas.—The largest group of South Texas producers ever assembled in a single body gathered in Houston Thursday evening, March 18, as hosts to members of the oil and gas division of the Texas Railroad Commission and members of the commission. The purpose of the occasion was a general get-together of the two groups to become better acquainted personally and to familiarize the producers and commission alike with the work of each body.

R. L. Dudley, president of the Gulf Publishing Company, was toastmaster at the banquet lasting more than three hours, and introduced W. S. Farish, president of the American Petroleum Institute, and Clarence Gilmore, chairman of the Texas Railroad Commission, the chief speakers of the evening. Mr. Gilmore in turn introduced to the producers the members of the commission and oil and gas commission.

Conservation of oil and gas in Texas as has been handled by the oil and gas division of the railroad commission since its organization in 1919 is getting down to a fine point through the hearty cooperation of the producers and commission with each other, in the opinion of leaders of each group as expressed at the meeting. Information given shows the work of the conservation leaders in Texas to have made wonderful strides in the six years of active work.

"When men of the industry sit down to figure with the government on the best methods of operation and future supply then the outcome can be nothing short of success to everybody concerned," W. S. Farish stated in lauding the work of the conservation board in Texas and the spirit of cooperation shown from both angles of the work. "We are approaching a degree of mutuality," he declared. He defined conservation as the economical use of any resources and pledged the industry to two prime obligations: To supply the public with fuel as cheaply as possible and to fulfill to the government the obligation of conservation.

Clarence Gilmore and Judge H. E. Bell, head of the oil and gas division, paid a tribute in turn to the industry for the spirit in which it received the work of the commission. It was their view that the industry is in its infancy in Texas as in many other vast regions, and predicted the best results with a continuation of the cooperation on the part of the operators, which has been shown in the past.

To the group of some 225 producers present at the banquet the following members of the commission and oil and gas division were introduced by Mr. Gilmore: Lon A. Smith and C. V. Terrell, commissioners; Judge H. E. Bell, chief supervisor of the oil and gas division; R. D. Parker, head of the gas utility division; Jack Morehouse, deputy supervisor for the Houston district; R. C. Lomax, Beaumont district; W. P. Laughter, Mexia district; Homer Pierson, Corsicana district; R. C. Hume, gas engineer, and Earl Calloway, chief clerk of the oil and gas division.

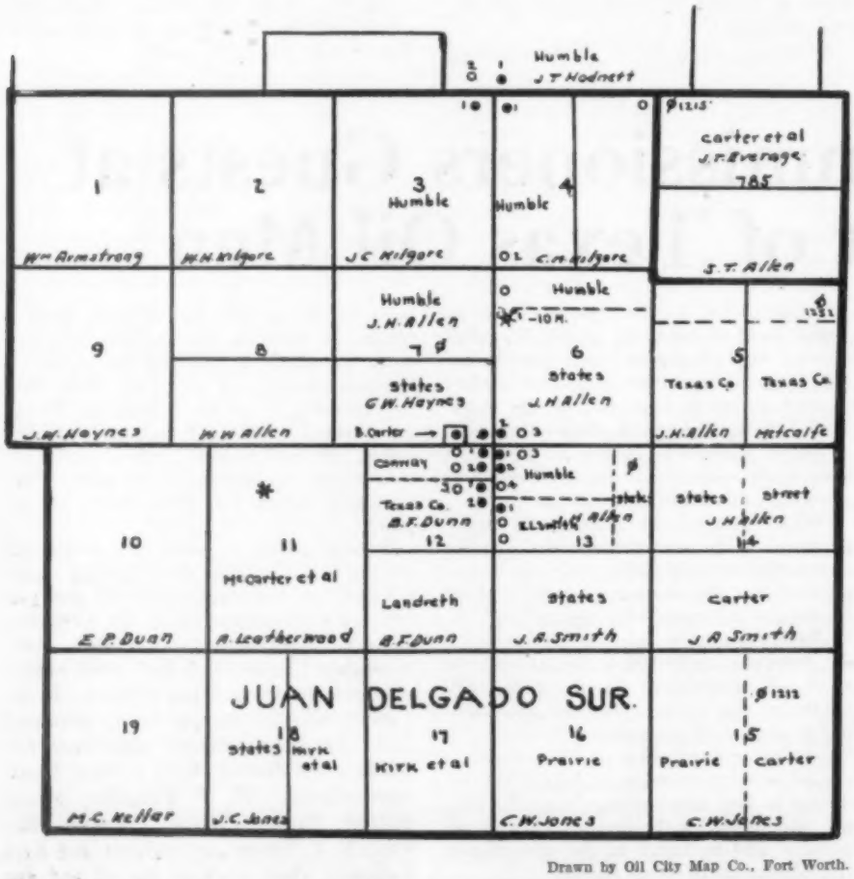
Blake Field Extension Well Makes Record Flow for Field

Cisco, Texas.—Previous records for big flush production in the shallow horizon of the Blake field in upper Brown County were shattered late last week when the E. L. Smith Oil Company's B. F. Dunn 1 widened the producing area one location to the southeast with an initial flow of 80 barrels of 43 gravity crude per hour after drilling nine feet in the Strawn sand to a total depth of 1126 feet. The well averaged better than 70 barrels per hour during the first 24 hour gauge, and has not taken the full thickness of pay. This well is a southeast diagonal offset to the 1200 barrel producer completed the week previous by The Texas Company from 21 feet of sand pay at a total depth of 1127 feet, and is on a line to the south of large producers completed earlier in the month by Humble.

Co-incident with the record initial flow established by the E. L. Smith Oil Company's shallow high gravity well, the 36 acre lease on which it is located also set a high mark on price paid to Abe Breman by the present owners. The E. L. Smith Oil Company acquired a half interest in this 36 acre tract about one month ago for a consideration of $10,000 cash; $5,000 payable out of seven-eighths of the oil; and one free well. The remaining half interest was acquired after the completion of The Texas Company's big well, but prior to the completion of the said free well, for a consideration of $35,000 cash, and $65,000 payable out of seven-sixteenths of the oil, making a total consideration of $115,000, of which $45,000 was cash, and $70,000 payable in oil. Including the drilling obligation assumed, this lease was sold on a basis of about $3,200 per acre without production. The performance of the E. L. Smith Oil Company's well proved to be a distinct surprise to all operators in the district, since it encountered the top of the Strawn sand pay about eight feet lower than the diagonal offset, and the bottom of the hole is now about nine and one-half feet lower than the total depth of The Texas Company's big well. Humble's Allen 3 was completed this week flowing 300 barrels natural at 1100-23 feet, while Barney Carter et al's Church lot made 100 barrels at 1105-26 feet.

An important extension to the southeast of the original Cross Cut field, Brown County, was made last week when J. S. Cosden Inc.'s Williams 1, R. L. Coffelt survey, started flowing by heads at rate of 100 barrels daily from regular pay at 1160-65 feet, but caught fire and destroyed the derrick before a completion could be had. Cosden holds a large lease surrounding this semi-wildcat producer.

A second completion for the Gwinnupp pool in Coleman County was made this week when Gwinnup-Burke et al's J. C. Dibrell 2, Hicks survey, made two million cubic feet of wet gas and about 25 barrels of oil from discovery sand at 1894-95 feet. The top of the sand was encountered at 1885 feet. Skelly Oil Company is erecting a natural gasoline plant near the discovery well. Canary et al's J. P. Morris 2 is spraying a small volume of oil with two million cubic foot gas flow from sand at 2750-73 feet. Morrison & St. John's Young Bros. 2, Jasper Escher survey, block 4, is making about 25 barrels of 38.5 gravity crude with water from sand at 1949-52 feet, and sufficient gas is present to make a natural flow.



Drawn by Oil City Map Co., Fort Worth.

Map covering the Blake area in Northern Brown County, Texas, where record sized high gravity Producers are completed in 1100-foot sand.

Decide No Exposition In Tulsa This Year

Tulsa, Oklahoma.—There will be no International Petroleum Exposition at Tulsa in 1926. That much was decided when directors met last week.

As for 1927 no decision has been reached. There has been some consideration of having the Exposition follow the annual meeting of the American Petroleum Institute here next year.

Plans for 1927 will be considered later. Whenever the next exposition is held, present directors favor an event that will be minus some of the features that attended the past expositions. These are summed up in the opinion that the affair had too many side issues. The semi-social features, the theatricals and the concessions will have no place in the next exposition.

Whatever is done for 1927 will be somewhat in keeping with desires of the manufacturers and dealers in equipment. Executives of these have said they do not favor an exposition each year and many of them refused to place their wares on exhibition in 1925.

Two years has been mentioned as a better schedule. So that is the chief reason for the belief that 1927 will see another exposition of another character.

Roxana Contemplates Line To New Chicago Refinery

St. Louis, Mo.—The Roxana Petroleum Corporation, it is rumored, contemplate extensions of the Ozark Pipe Line system to allow delivery of crude oil to the Chicago territory, as well as a line into the Arkansas heavy oil field.

Recently the Roxana announced the building of a plant at Hammond, Indiana. This is taken to mean extension of the Ozark line to that territory.

The project to build from Smackover to the present Ozark trunk line somewhere in Missouri is also under consideration but is in preliminary stages.

Requa Would Have Industry Take Lead in Conservation Movement

Tulsa, Okla.—In a brief address Wednesday night as a guest of Mid-Continent Oil and Gas Association, Mark L. Requa made a plea that the oil industry place itself on the offensive in the matter of conservation. The former director of the oil division of the wartime fuel administration explained his position as that of an individual expressing only his own views as evolved in his search for an answer to the problem now facing the industry.

"This industry should put itself on the offensive," he said. "It is on the defensive now."

His suggestion as a means for taking the offensive involves the promulgation of a conservation program within the industry. This, he said, should be taken to the federal oil conservation board. "Tell the government that conservation of petroleum means greater prices for gasoline and let the government assume the responsibility for high prices. I cannot conceive of conservation of a production without an attendant higher price for the product. It is fundamental that nothing will be saved as long as it is cheap and plentiful."

As a vehicle for accomplishing this he suggested the formation of a committee, perhaps in the American Petroleum Institute, to determine upon methods of conservation, this committee to function as a relation of the industry to the government through the Federal Oil Conservation Board.

He singled out three things seemingly essential to carrying through conservation of petroleum. First, education of the public; second, education of congress; third, education of the oil industry itself.

Mr. Requa expressed the opinion that too much fuel oil is being burned under boilers, where some other fuel will serve as well. He said gasoline, Diesel engine oil and lubricating oil are thus consumed, which should be used in the higher forms of petroleum. "I wonder," he continued, "if it is not possible to devise some means of formulating a price level for gasoline over a long period. Such a program might mean a relatively higher price for gasoline now but a cheaper price over the long period. If the oil industry conserves petroleum, it means selling less of the products. Then in order to pay dividends on its investment, it must get a higher price for what it does sell."

Mr. Requa said he had come to his opinions largely from his experience as director of the oil division of the fuel administration. "But I don't blame you men," he admitted, "for being gun shy of governmental control. But the situation now is not a question of what should have transpired, it is a question of getting what has transpired. Something like the Federal Oil Conservation Board has been indicated for a long time. It is here, and the proper thing to do is meet it and direct the course of the movement rather than oppose it." He said he believed too much oil was being burned as fuel but placed the responsibility of changing that condition on the oil industry rather than on the government.

Citing the railroads and their plight for lack of directing legislative trends, he pointed out the chance the oil industry might have to help itself through taking an offensive. "We of the oil industry," he explained, "look on this condition from one viewpoint. We think of progress and success of our industry. But there is another side of it—that of the public, represented through the government in the Federal Oil Conservation Board. It is simply a matter of time until the nation must take cognizance of economy in raw materials. "What we of the industry should do is help find that middle ground for utilization of this one raw material—oil. The only way to curtail the use of petroleum for certain uses is to make them more valuable for other uses. If oil were too valuable in price for burning under boilers, it would cease to be used there. Then it would be used where no substitute exists."

He said he believed the Federal Oil Conservation Board would be a permanent body at least through the present federal administration for the reason that some answer must be made to the request set up in the letter of President Coolidge creating the board. That the question of oil conservation may become a political issue is possible only through lack of the republican party to carry through a program, leaving the democratic party to take up the issue he stated. Since some answer must be made for creating the board, he said he thought the oil industry should take the offensive and help to answer the problem of conservation.

High Gravity Oil in Crane County On University Land

San Angelo, Texas.—The discovery of oil and gas production in commercial quantities late last week on University of Texas fee land in the northeastern part of Crane County by Church & Fields and Turman & Maxwell has greatly revived lease buying and wildcat interest in West Texas. This well is credited with having flowed after making one trip with the swab, from sandy-lime pay at 3027-30 feet. The swab was lost in the hole on the second attempt to reduce the fluid level Sunday, and fishing tools have been sent for to recover the swab. The presence of about 1500 feet of 32 degree oil and 500 feet of water in the 8¼-inch hole along with about one million cubic feet of gas was reported before the fishing job developed. This wildcat is about 16 miles north and slightly west of the nearest production in the Hurdle district, but does not coincide with the producing horizon in the latter district, while indications point more favorably to it being somewhat similar to the Big Lake pay.

The new Crane County discovery is located in the center of the southeast quarter of section 34, block 30, and logged the top of the salt at 1145 feet and the top of the lime at 2925 feet, with a surface elevation of 2676 feet. A string of 15½-inch casing was set at 302 feet, and 12½-inch casing at 728 feet. The test was drilled to its present depth with open hole, and passed through water bearing formation at 1991-2000 feet. The hole was reduced to 10-inch at 1750 feet and to 8¼-inch at 2450 feet. Water was carried in the hole when the oil and gas pay appeared at the 3027-foot horizon, and late last week a string of 8¼-inch casing was set at 2450 feet to shut off the water.

The quartette of individuals owning the new Crane County discovery originally held permits, or leases on 16 sections of University land, and sold protection acreage to a number of the major companies, while the former still controls about 3000 acres. A sizeable quantity of unleased acreage is located to the north and west of this drilling block, and it is expected that a sale will be held by the State Land Commissioner in the near future to permit companies to obtain the mineral rights at the highest bid. In the event deeper drilling that is to follow shortly on the wildcat producer yields a flowing well, big

prices will be obtained by the University of Texas for the drilling rights. Gulf has protection around the well, and a block of 17,000 acres located almost solid, beginning 2¼ miles south of the new discovery, while Gulf also has a big block located to the northwest of the promising well. Gulf's 17,000 acre block was obtained last month for a consideration of $85,000 and the drilling of a 3500-foot test in the southeast quarter of section 203, block "F".

The Independent Oil & Gas Company-Turman & Maxwell's wildcat producer in the southeastern part of Crane County on the Len Taylor land, Sapp survey, is being given a production test, and will be deepened 25 or 30 feet later in search of a lower pay horizon. This well is swabbing and flowing 125 barrels of 29.5 gravity oil daily from sandy-lime pay at 2036-45 feet, and has been in process of completion more than one month.

The incomplete wildcat producer on the Todd ranch, Crockett County, which was purchased last month by The Texas Company from C. J. Cooke and associates for a consideration of $250,000 cash, and $400,000 additional payable from oil, was opened early this week. It gauged five million cubic feet of gas, having a rock pressure of about 200 pounds. This well was credited with flowing high gravity oil, before it was closed in pending sale. The well did not make any appreciable amount of oil when opened this week. The Texas Company is to resume drilling on this test before the close of the present week.

Deep failures on wildcat blocks in West Texas were on the increase during the past week. Among those reported were: Kirby Petroleum Company's Union 1, Upton County; Deep Rock Oil Company's Scott-Hyman 1, Howard County; Lockhart & Company's Johnson 1, Loving County; and Marland Oil Company's Shumaker 1, Mitchell County.

Charles E. Barrett Dies

Charles E. Barrett, well known Gulf Coast and Oklahoma operator, died Sunday at a San Antonio hospital following a lingering illness. He was 59 years old at the time of his death, and made considerable history in the oil industry since 1902, when he started his first operations.

Barrett is well known in the industry for his work in the development of Humble field in its early days. He is credited with having brought in some of the first producers there. In 1907 he entered Oklahoma and played a great part in the development of Glen pool where a company organized by him, controlled considerable producing properties. At the time of his death he still had a substantial interest in his Oklahoma company.

The past eight years Barrett has led a retired life at his San Antonio home. He is survived by his wife, Mrs. Mary Frances Barrett; a daughter, Mrs. J. E. Rogers of Houston; a son, C. E. Barrett, Jr., of Austin, and two sisters, Mrs. Elizabeth Rollo, of Houston, and Mrs. J. N. Nuze, Houston.

Standard to Build Gas Line From Monroe to Baton Rouge

Baton Rouge, La.—Plans are being made by the Standard Oil Company of Louisiana to lay a 22-inch gas pipe line to transport fuel from the Monroe gas field to Baton Rouge, a distance of 178 miles. Preliminary surveys for the line indicate that it will cross the Mississippi River near Natchez, Miss.

Other gas interests in the Monroe field are reported to be connected with the project, and natural gas for domestic use in cities near the line is probable from the volume of gas capable of being transported through a line of this size.

The 38,000 tons of pipe was obtained from the National Tube Company and Spang, Chalfant Company. Ford, Bacon & Davis, Inc., is reported to have charge of the engineering.

Speakers Announced for California Oil Banquet

Los Angeles, Calif.—Speakers for the annual banquet of the California Chamber of Mines and Oil, to be held in the Fiesta room of the Ambassador hotel, Los Angeles, on the evening of April 7 will be Paul Shoup, vice-president of the Southern Pacific railroad, and Russell H. Ballard, vice-president and general manager of the Southern California Edison Company.

According to the committee in charge of the banquet, Mr. Shoup will speak on "Conditions Within the Oil Industry," while Mr. Ballard will speak on "California Development Under Private Enterprise and Individual Initiative."

Subcommittees in charge of entertainment are planning many surprises and promise that this year's affairs will be more colorful than any of its predecessors. Complete details of the banquet, together with reservation blanks, are in hands of oil and mining men. Preparations are being made to handle an overflow crowd.

Driller Killed at Hull

Hull, Texas.—Emanuel Redman, driller for the Republic Production Company on the Dolbear No. 121 in Hull field, was killed instantly March 20 by an unexpected head of oil under strong pressure coming in while he was using a water hose to wash sand out of the connections. His clothes were torn entirely from his body when he was caught in the stream and thrown through the side of the derrick and over the pump more than 10 feet away.

Casing had been set in the well Friday and control head and connections placed. The well blew out Saturady, blowing the connections out of the control head leading to the slush pit, and sanded up shortly. Redman was engaged in clearing the sand when the second head came without warning.

Supreme Court Will Review Decision in Doheny Case

Washington, D. C. — The United States Supreme Court on Monday consented to review decisions of the lower courts cancelling the oil leases and contracts negotiated by Edward L. Doheny with former Secretary of the Interior Albert B. Fall.

The case involves the contracts for the Elk Hills naval oil reserve and that under which the Doheny company constructed oil tanks at Pearl Harbor, Hawaii. The principal cause for review of the case was the inability of the lower courts to agree on the question of compensation for the storage tanks, the district court having allowed ten million dollars which was overruled by the circuit court, but the supreme court will go into all phases of the case, including the legality of the executive order of President Harding transferring jurisdiction over the naval oil reserves from the navy to the interior department.

Represents Tank Company

Tulsa, Okla.—J. E. (Ernie) Richards now is associated with the American Tank Company of Oklahoma City and Tulsa in charge of the Tulsa offices of the company, succeeding C. G. Wells, who has resigned.

Ernie, as his friends know him, formerly was with the Jarecki Manufacturing Company in Tulsa and is well known throughout the Mid-Continent and other fields. He will have supervision over all sales of the American Tank Company in the Tulsa territory.

Offices of the company in Tulsa are located at 940 Kennedy building.

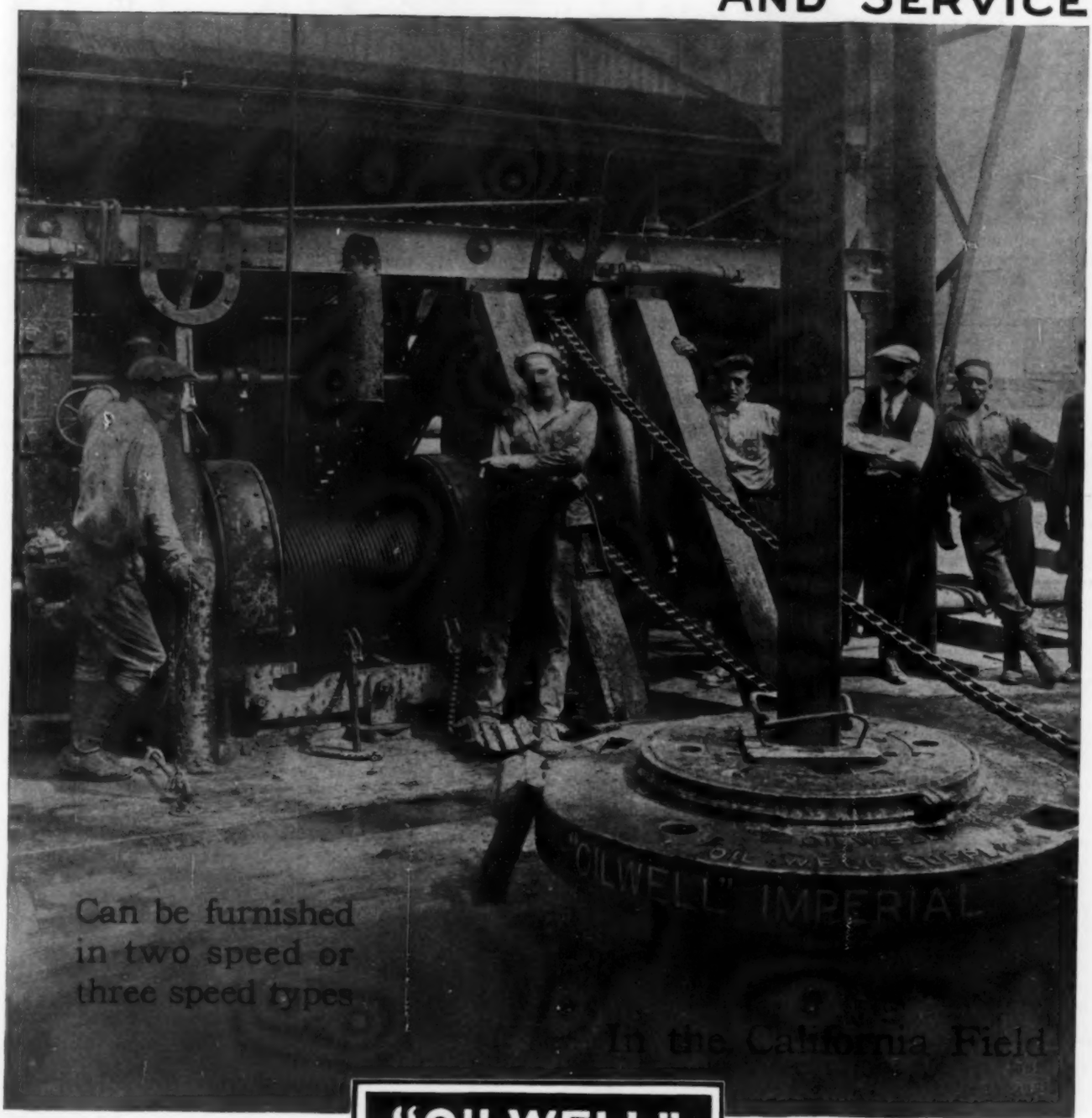
Lockport Completion

Houston, Texas.—Production was practically doubled in the Lockport field Monday when Vacuum Oil Company made 3300 barrels initial in its Miller No. 6 on the Charles Miller estate, which is held in lease by the Vacuum and Gulf on a 66-33 basis respectively. The new crude tested 24.3 Baume, and is coming from 4457 feet. Three days after completion the well was making 2500 barrels.

Miller No. 6 is located 1500 feet southwest of the No. 1, discovery well. It brings the number of present producers to five with a combined production of more than 5,000 barrels.

C. S. "Cleve" Campbell, associated with the W-K-M Company, Houston headquarters, has just returned from an extended trip through the Middle-North States where he made an intensive study of the problem of reducing pipe line maintenance expense and the application of this company's pipe cleaning machine in the work.

IN "OILWELL" HOISTS THERE IS STRENGTH AND SERVICE



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OIL WELL SUPPLY CO.

NEW YORK—LOS ANGELES—PITTSBURGH, U.S.A.—SAN FRANCISCO—TAMPICO—LONDON
WORLD'S OLDEST AND LARGEST MANUFACTURERS OF OIL FIELD EQUIPMENT

(REGISTERED)

Say you saw it in The OIL WEEKLY

There Are No Unimportant Details About Fishtail Bits

Improvement in field handling required to secure full efficiency provided by steel maker

By Harry Pennington
Mechanical Engineer

THERE are a few alloy steels in which the heat treatment may be accomplished without great difficulty, although the forging and hardening temperatures are higher than with carbon steels. Alloy steels are not fool proof to the same degree of our medium carbon compromise steel, and more skill is required to handle alloys, coupled with greater control and indication of temperatures.

Forging temperatures are higher than required for carbon steels—tungsten steel must be forged at temperature 2200 to 2400 F., and hardened at 2200 to 2300 F.—and drawing is necessary. Many tools of high speed steel require quenching in two stages, that is, a first quench down to 1100 F. to 1000 F., in a bath maintained at this temperature, followed by a final quench in oil, to secure the best effects of the alloys.

Unless the user is equipped with proper furnaces, for two stage heating, baths for two stage quenching, all subject to exact pyrometric control of temperature, the value of high alloy steels will not be secured and, as there has been no general effort in the field to furnish this equipment, or to require close control of heat treatment, these steels have not gained the prominence due them.

In furnishing an alloy tool steel bit, the Mission Machine & Supply Company, of San Antonio, Texas, adopted the policy of stamping on to the bit, full directions for forging and hardening—a capital idea—for there are so many kinds of steels that their identity must be preserved to insure proper treatment.

There are other alloys of metals than steel that take on greater hardness and resistance to heat and abrasion than carbon steel, which are applied to the cutting edges of fish tail bits by flowing on. These have been previously described by another writer in the pages of The OIL WEEKLY.

Pin Jumping

With the same quality of steel, the pin has far greater strength than the pipe used for turning it, hence we do not look to the size of the pin for the source of pin jumping. While the two water courses detract from strength some, still there is far more metal in the fish tail bit shank than in the drill pipe.

The design and method of manufacture of a fishtail bit may be beyond criticism but high quality steel and perfect mechanism are of no avail unless the bit receives proper attention after reaching the field. The treatment of bits in the field has been outlined by Mr. Pennington in the accompanying article which concludes his discussion on this very important field item.
The Editor.

The most prevalent cause of pin jumping is improper or no heat treatment during the shaping of a forging into a bit blank. Over heating embrittles steel — over heated shanks should never be run, or rather, the manufacturer of bits should never send out a shank that has been over heated for embrittlement of this kind is difficult to detect in a finished pin.

Forging strains, forming the shank under the hammer, cause brittleness; cold forging sets up internal strains—that is unless these strains are removed by normalizing the whole bit after forging the blank to size and before machining the thread. Normalizing is described under heat treatment.

As a general proposition, the steel used in bits, when correctly treated, has greater strength than the steel of the pipe, comparing equal sections, both in compression, bending and torsion, so that pin jumping can invariably be laid to the treatment of the steel.

To avoid bending stresses on the blade from spudding, the pin and blade should be on the same center line.

Screw Threads

At one time the only screw thread used on fish tail bit shanks was the Briggs standard used on drill pipe, eight threads per inch. This thread screws in very tightly in hard digging, or with a large diameter hole, and galling is set up easily.

The bit steel being usually harder than the steel of the drill collar, drill collar threads gall instead of the fish tail bit thread.

These difficulties gave rise to many special kinds of drill collar threads, of which the writer has a record of 26 that are in use today. Taking the service obtained from these threads it is apparent that:

Coarse threads do not gall as quickly as fine threads;

Taper threads with a shoulder, tool joint style, thread up more quickly, break out more easily, and are more durable than threads without a shoulder.

Threads from six per inch in small sizes up to four threads per inch in six-inch afford excellent service.

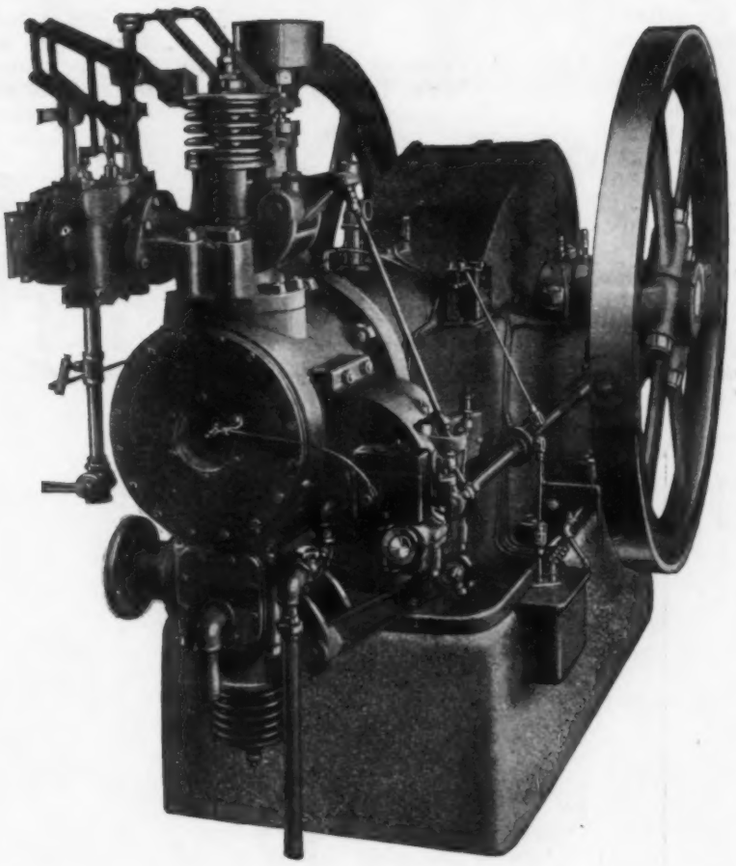
Since bit and drill collar threads are subjected to the same stresses that tool joint threads are, if a standard thread is adopted, it seems that the standard could be fixed to accord with tool joint box and pin threads, not only to secure a good thread, but to reduce the multiplicity of thread sizes, tapers, to a single standard. In this manner, thread templets, cutting tools, taper testers, could be materially reduced in number, with a small reduction in cost in some sizes of bit threads.

There is nothing more annoying on a drilling rig that to have three or four different kinds of threads on bits, for at least two drill collars of each kind are necessarily kept on hand, one for use and a second for reserve to prevent delay should the one in use get damaged any way.

Threads on fish tail bits should be cut just as accurately and smoothly as the best tool joint thread; rough threads gall the drill collar. When lathe cut, two finishing cuts, the last very fine should be taken to smooth these threads out, when, if the steel has been properly normalized, threads will not damage the drill collar. When threads are milled on the finished taper, the first cut should allow a fine finishing cut to smooth the threads out to a fine finish.

Dented threads on a fish tail will also damage the drill collar and a protector should be placed on every bit immediately it comes out of the hole and is unscrewed, and never taken off until the bit is again needed to screw back into the drill collar. If drill bit threads are dented slightly, a triangular file will straighten them out, but if the dent extends too deeply, the thread should be put back in the lathe and re-threaded and shouldered.

Every bit thread should be inspected carefully to insure that none will be



Another Feature of the Reid 65 HP Four Cycle Gas Engine The Cylinder and Bed Construction

The cylinder and bed construction of the new Reid 65 HP Four Cycle Gas Engine is unique for an engine of this size. The combustion chamber is cast integral with the barrel of the cylinder and is water-jacketed on the closed end up to the bed flange. The barrel of the cylinder fits into the bed which is designed to form a water jacket for the barrel. A rubber packing ring, held in place by a gland, forms a water tight joint between the bed and the nose of the cylinder.

In addition to the ease and economy with which the barrel can be removed, this design has the further important advantage that no gaskets are required in the combustion chamber thus eliminating the possibility of leakage and gasket trouble.

This is only one of the many features of the engine, others will be explained in subsequent advertisements. A complete description is given in our Bulletin No. 31. We will be pleased to send you a copy.

Joseph Reid Gas Engine Company, Oil City, Pennsylvania, U. S. A.

Branches and Agencies: Marietta, Ohio; Logan, Ohio; Newark, Ohio; Shreveport, La.; Charleston, W. Va.; R. B. Moore, Bolivar, N. Y.; Frick & Lindsay Co., Bradford, Penna., and Kentucky Distributors; S. R. Shoup, 708 Pacific Electric Bldg., Los Angeles, Calif.; Frick-Reid Supply Co., Tulsa, Okla., and Branches, Distributors for Oklahoma, Kansas, Texas, Arkansas and Wyoming. Export Sales Representative—Oilfield Equipment Co., 30 Church St., New York City. Branch Shop: Tulsa, Okla.

run that are imperfect, and each time a bit is taken out of the drill collar, the drill collar thread must be also inspected for imperfections, for a bad thread on either bit or collar is more apt than not to jump the bit out of the collar, and few fishing jobs are worse than a bit off in the hole.

The center line of thread should coincide with a center line through the blade and the two points. If the blade is off center, or the points are off center, the drill collar rotates with an eccentricity which, at moderately high speeds, sets up whipping in the drill pipe above.

And when bits are dressed, this same precaution should be taken. The bit gauge, Figure No. 10, is for measuring the eccentricity of a bit, applied in the manner shown to both sides of the drill collar and the bit. This gauge is

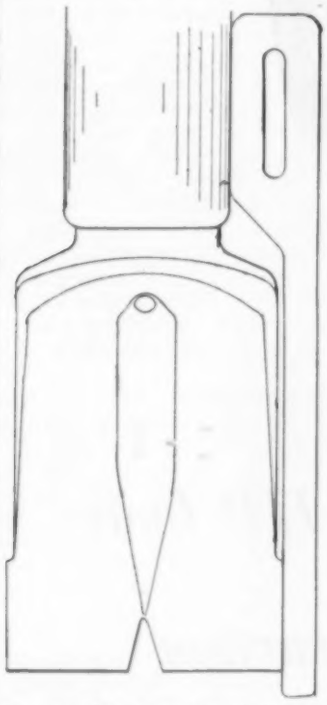


Figure 10. Bit gauge for eccentricity.

made of ordinary sheet steel, ten gauge, to suit the bit and collar.

To machine a smooth thread on a bit, the steel should be normalized to remove local hardness in spots from forging.

Threads that screw too tightly are broken out with difficulty with the rotary, breaking tongs, chains, and bending break out rotary posts. Threads may be started by using a sledge hammer on the blade; this practice is followed on many rigs.

The Water Courses

Water courses range from 3/8 to 7/8 of an inch in diameter, depending upon the size of hole and drilling pump used, and the diameter of shank.

A small diameter water course sets up correspondingly higher velocities of water jetting therefrom and, if the pump is so proportioned as to deliver volume and pressure, the smaller diameter water courses jet drilling slush out at higher speeds. For convenience in ascertaining these velocities, a table is appended, giving these for holes 1/2-inch, 5/8-inch, 3/4-inch and 7/8-inch diameter.

Table of Velocities of Mud Fluid Water Courses

	U. S. Gallons per Minute			
Dia. each hole inches	100	200	300	400
	Velocity in feet per second			
3/8	145	290		
1/2	82	164	246	
5/8	52	104	156	208
3/4	36	72	108	144
7/8	25	50	75	100

High velocity of jet undoubtedly assists in breaking up all classes of formation, excepting rock, pulverizing shales and mixing up clays and gumbo.

Smaller jets set up more pressure on the drilling pump, but, where the volume required to flush the hole clean is not great, placing smaller water courses sets up higher velocities without greater volume. When a greater volume is pumped, additional friction is set up in the slush travelling faster down the drill pipe and up the hole, in the ratio of the square of the velocity, requiring still more steam for this additional pressure load, but when the velocity of jet is increased with smaller water courses, the only additional pressure put on the drilling pump is that from the water courses, which is a small percentage of the whole friction of the mud laden columns.

The effect of velocity of jet appears to be great when the jet is in air, but submerged, the jet is retarded appreciably hence short bits are prized for drilling formations that ball up and fill the hole above the bit.

In spudding, the water courses may be plugged by gumbo, necessitating coming out of the hole to establish circulation. Sometimes, a plugged bit may be cleaned by setting the string down rather sharply on the rotary with the elevators, although this is accompanied with danger in deep holes, and is not recommended except in holes that are shallow.

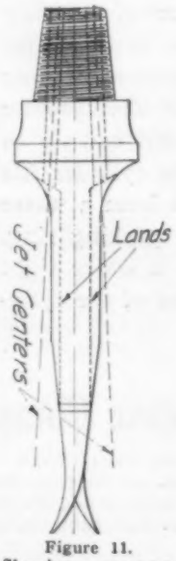


Figure 11. Showing water courses and lands.

Water courses should not be drilled too closely to the threads of the shank for sand laden slush will cut the holes out to the threads and ruin the bit.

The lands of a bit, Figure No. 3, are sunk in the blade to free the jets leaving the shank. Figure No. 11, a side elevation, shows the lands with the jets passing out away from the shank. Since the jet is retarded if it contacts the bit blade below the shank, the holes should project the jets so that the jet is free immediately upon leaving the holes. With the jets projected downward, parallel to the blade center line, this is not always possible, especially in small shanks, but with the holes drilled at an

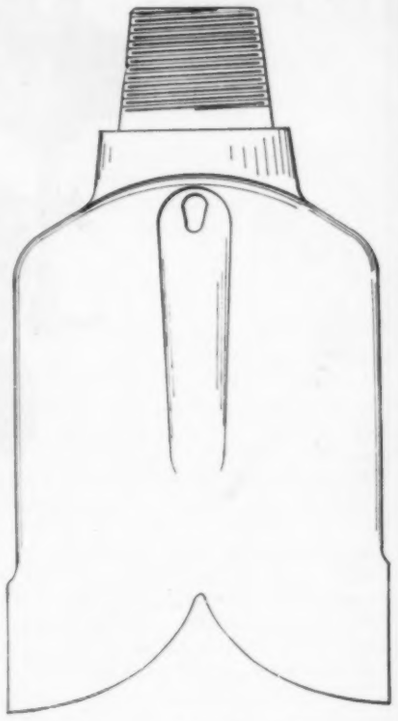


Figure 12. Fishtail edge form

angle as shown in Figure No. 11, the jets can be freed upon leaving the holes.

As noted herein, accumulations of cuttings are driven to the side of the hole by centrifugal force and by the razor effect of blades, and projection of the jets to the sides of the hole assists in breaking up the formations with the force of jetting.

A jet projected immediately behind the cutting edge tends to cool the bit; jets immediately in front of the cutting edge tend to break up the formations piled up in front of the bit. Formations easily broken up by a jet allow the water to pass down through in front of and cool the edge, but formations like gumbo, in which the bit may dig deeply and therefore run the cutting edge in a dry formation, would call for the jets in back of the cutting edge to cool, but at a loss of some of the jetting action of the water in mixing up gumbo into slush. But, when gumbo is drilled at high speed, taking off thin shavings with a fine feed, and mixing them into slush as fast as cut up, without balling up the hole, the jets in front of the cutting edge not only assist in mixing but also will keep the blade cool.

The issuing jets rotate of course, and

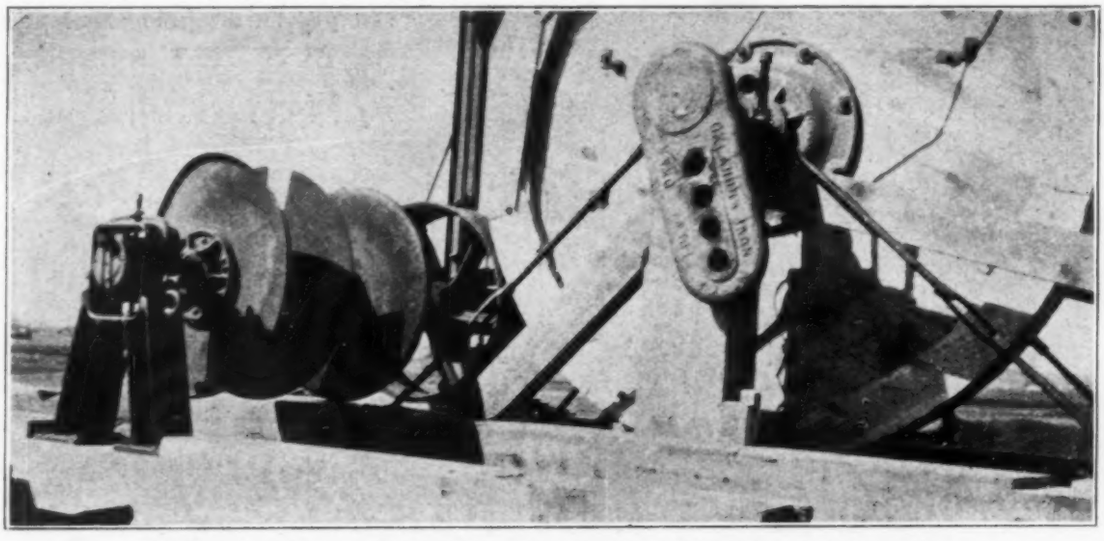
(Continued on Page 72.)

EVERY OSAGE SALE

Brings New and Satisfied Users of the

SHAFFER ALMETAL

SAND REEL SUPPORTS



"Shaffer Almetal" Sand Reel Support, Set Up in Operation, Friction Drive, No Clutch to Wear.

Unquestionably— *The most economical, serviceable,* Bailing Device on the Market

—ASK THE MAN WHO USES THEM—

If you have not received our Latest Descriptive Catalogue we will gladly forward same upon receipt of your address

Manufactured by

THE SHAFFER SPECIALTY COMPANY

TULSA, OKLA.

115 SO. DENVER ST.

IF IT'S WORTH DRILLING FOR IT'S WORTH SAVING

$305.28 increased daily *Profit* from increased gravity and increased production

Positive proof that Smith Oil and Gas Separators are profit makers, by increasing gravity and production.

Every point of gravity increase means 8 cents per barrel increase in price. Every point of gravity increase means 2 per cent increased production.

Let us prove this fact on your lease.

CONTINENTAL OIL COMPANY
TULSA DIVISION
BOX 815, TULSA, OKLAHOMA
February 19, 1926.

L. R. LANTZ
GENERAL SUPERINTENDENT

Smith Separator Company,
Chestnut and Smith Bldg.,
Tulsa, Oklahoma.

Gentlemen:

We thought you would be interested in knowing of the performance of one of your Type No. 1 Separators which, according to our records, has given the following service:

Installed on the Munn and Glidden property in 28-20-12, near the Country Club, Tulsa, which property we purchased. The Separator operated on that lease until we had no further use for it, then we moved it to Keystone on our townsite location 25-20-9 where it was in service as long as it was needed on a small well we drilled in there. We then moved it to our Turner Lease near Ketunka, 4-9-9. It was in service here for a length of time and was then moved to Blackwell on our Hubbard Lease 1-26-2 before the well was completed and then drilled in the well was was dry. We then drilled in a 1200 Barrel well on our Hominy lease in 29-21-8. Before we installed the Separator on our well near Hominy we had 38.4 gravity. After installing Separator we had 40.2 gravity in stock tanks. By the increase in gravity of practically 2 degrees, we of course, had increase in price of 16¢ per barrel on 1200 barrels, which makes $192.00. Increase of 2 degrees in gravity also makes a 4% increase in quantity, or an increase of 48 barrels over the original 1200 barrels. The 48 additional barrels at $2.36 per barrel is $113.28, due to increase in production. We figure that we are now getting from our lease at Hominy an increase of $305.28 per 24 hours which were losing prior to installation of your Type No. 1 Separator.

You will note that this Separator has been in service for over two years. We took it shortly after it was installed on its original location and to date we have not spent one cent for repairs, and it is today operating as satisfactorily as when first installed.

We thought you would be interested in having the above information, and wish to advise that we are more than pleased with the service we have gotten from this Separator.

Yours very truly,
CONTINENTAL OIL COMPANY,

"If it's worth Drilling for, it's worth Saving"

NEW YORK OFFICE:
Export Representative
Oil Field Equipment Co.
30 Church St., New York
Cable Address
"Oilfield" N. Y.

CALIFORNIA OFFICE:
2041 East 38th Street
Los Angeles, California

SMITH SEPARATOR COMPANY
Tulsa Okla

LONDON OFFICE:
Perkins MacIntosh Petroleum Tool & Boring Co., Ltd., 25 Bishopsgate
Cable Address:
"Oleborers" London

TEXAS OFFICE:
507 State Nat'l Bank Bldg., Houston, Texas
820 Staley Bldg., Wichita Falls, Texas

Say you saw it in The OIL WEEKLY

Osage Lease Bonuses Total Nearly Four Million Dollars

Bidding in sale not so spirited as in former years and many tracts passed with no offer

By Roye Munsell
Staff Representative

Pawhuska, Okla.—The bonuses paid for the 400 tracts purchased at the 26th auction sale held here of Osage Indian tribal lands for oil development totaled $3,998,785.00. While the sum is not nearly so large as that of previous years when the great Burbank field was yet to reach its peak and the figures ranged between six and ten million dollars, the amount received this year by the Indian agency was very satisfactory considering the unproven nature of much of the acreage offered.

The sale lasted through two days, March 17th and 18th, and a total of 739 tracts comprising) approximately 160 acres each were on the schedule. Only 400 were bid on and sold and it is probable that had not the customary initial bid of $500 been reduced to $300 a goodly portion of these would have been passed also. The lowering of the initial bid came about because not a few of the parcels had little value except as a wildcatting proposition. Their purchase will call for no immediate drilling.

On March 17th, the first day of the sale, only tracts east of Range 7, taking in much wildcat territory and also the older Osage areas, were put up. Of the 316 tracts offered, 205 were passed for want of even the initial bid of $300.

East Side Tracts

The top price of $37,000 was paid by The Texas Company for the southwest quarter of 29-26-8, adjacent to the Wilcox sand pool opened up by the Atlantic Oil Producing Company eight miles southwest of Pawhuska.

The bidding for the tract was keen between The Texas Company and the Lewis Oil Company. The same companies also spiritedly contested for No. 228, the neighboring tract, being the northeast quarter of 30-25-8. The Lewis Oil Company was the purchaser of this tract after raising the bid to $29,000.

The battle for acreage near Wynona was sometimes warm. When Earnest McCarty paid $3800 for tract No. 154, being only 40 acres in the southeast quarter of 32-20-10, a good price, considering the size of the parcel, was paid.

Favored tracts on the east side were rather few and widely scattered. The majority sold went for the initial bid or slightly over.

ANOTHER SALE SOON

Tulsa, Oklahoma. — J. George Wright, superintendent of the Osage Indian agency, has indicated that another sale of leases may be held in June. Operators have been invited to make known their wishes for particular tracts to be offered in the forthcoming sale.

The real bidding did not come until the second day of the sale when Burbank tracts and others west of Range 7 were put on the block. Contrary to expectations the initial bid of $300 was accepted as a starter if that inducement was necessary.

Three Tracts $1,800,000

Three tracts adjacent to the Burbank field purchased by the Phillips Petroleum Company for more than $1,800,000 brought the top prices. One of these was No. 579, southwest quarter of 1-27-5, which offsets a very productive lease the Phillips Company acquired at a recent sale. It also offsets producing leases of several other companies. The contest for the tract involved the Carter Oil Company, the Prairie Oil and Gas Company, the Lewis Oil Company and the Gypsy Oil Company, and was not settled until Phillips bid $710,000.

The Phillips Company also bought No. 583, northeast quarter of 12-27-5e, diagonally to the southeast, paying $625,000 and No. 503, southwest quarter of 21-26-6, a south offset to the most southerly producing lease of the field.

The contest for other tracts near the Burbank field was sometimes spirited but did not call for unusually large sums because of the rather indifferent production being found in some places on the present edge of the field.

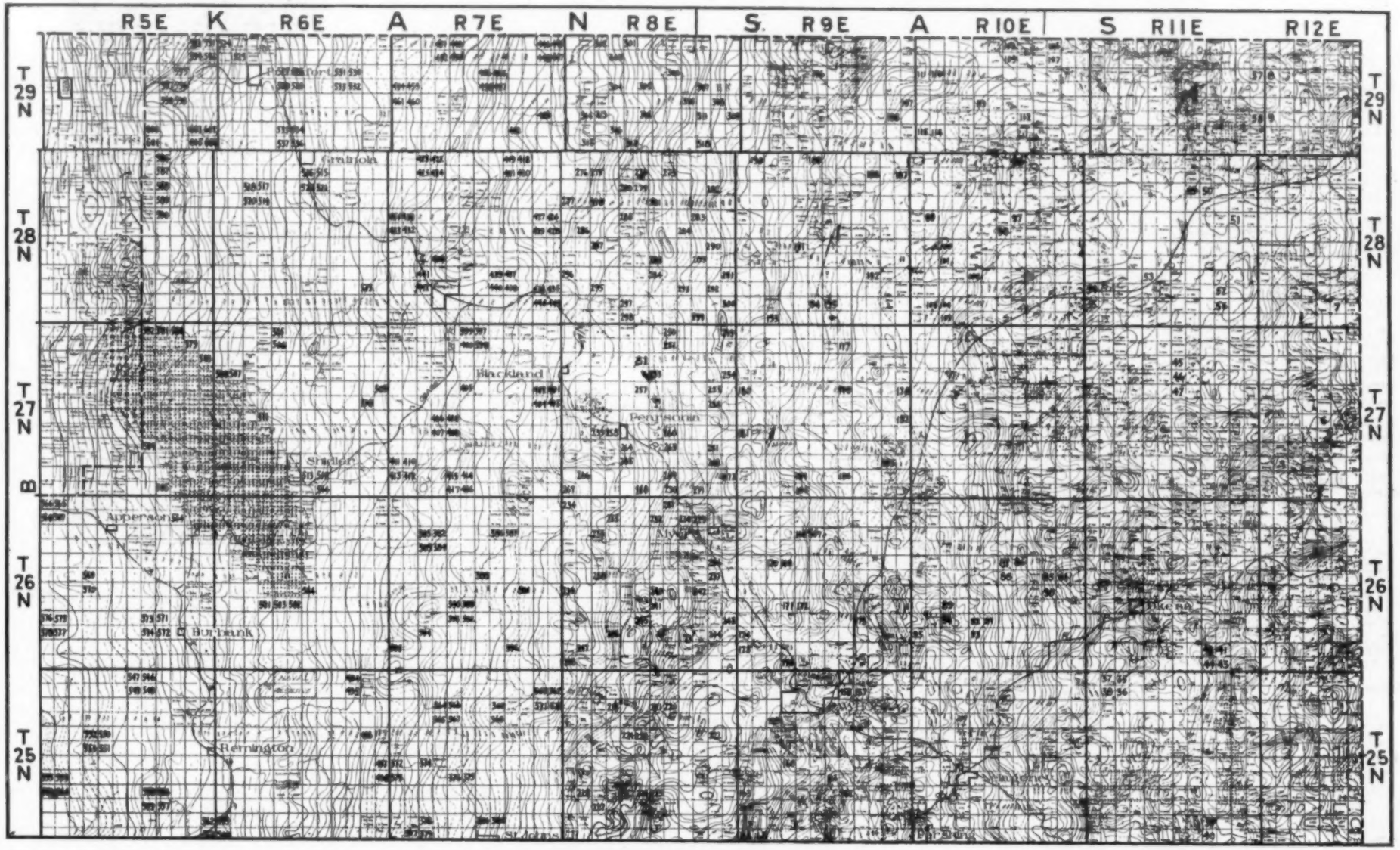
It is interesting to note the comparatively high prices paid for the tracts offered nearest Fairfax. Although Nos. 325 and 326, south of Fairfax, went to the Gypsy for the initial bid of $300, Nos. 327 and 328 in 11-21-7 were purchased for a much larger sum due to keen competition. Marland was among the contenders for both these tracts but they finally went to the Gypsy for $9100 and $15,500 respectively.

There was a manifest interest in the areas south of Burbank and the development of the tracts purchased at the sale will, no doubt, see the opening of some nice producing districts there which in time will be connected into a sizable field.

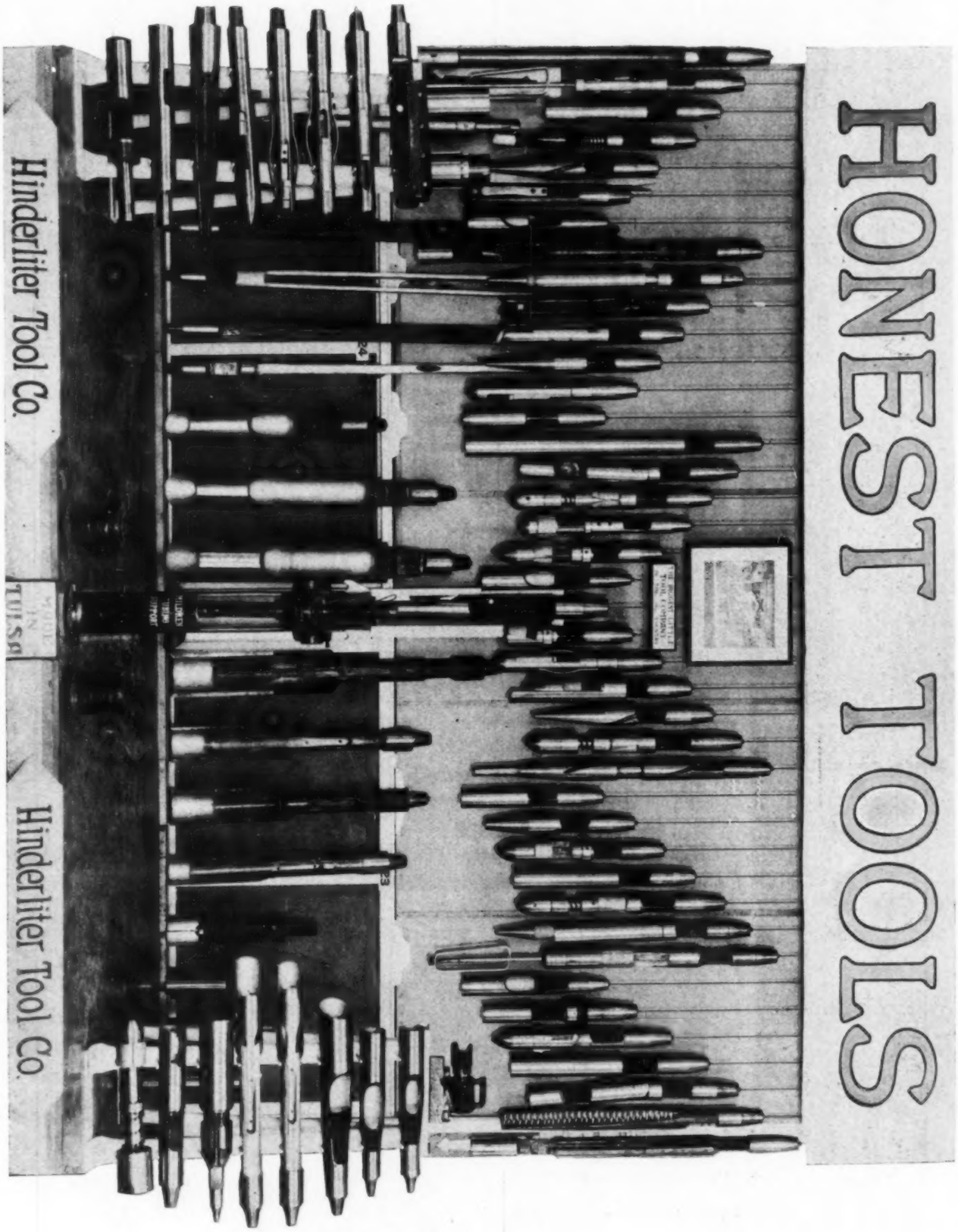
Portion of the New Fairfax field in Osage County, Oklahoma. Prairie's Discovery Well is seen in the center

MAP SHOWING OSAGE TRACTS SOLD MARCH 17-18, 1926

(Tracts sold indicated by number in which they were offered.)



(*Continued on Page 40*)



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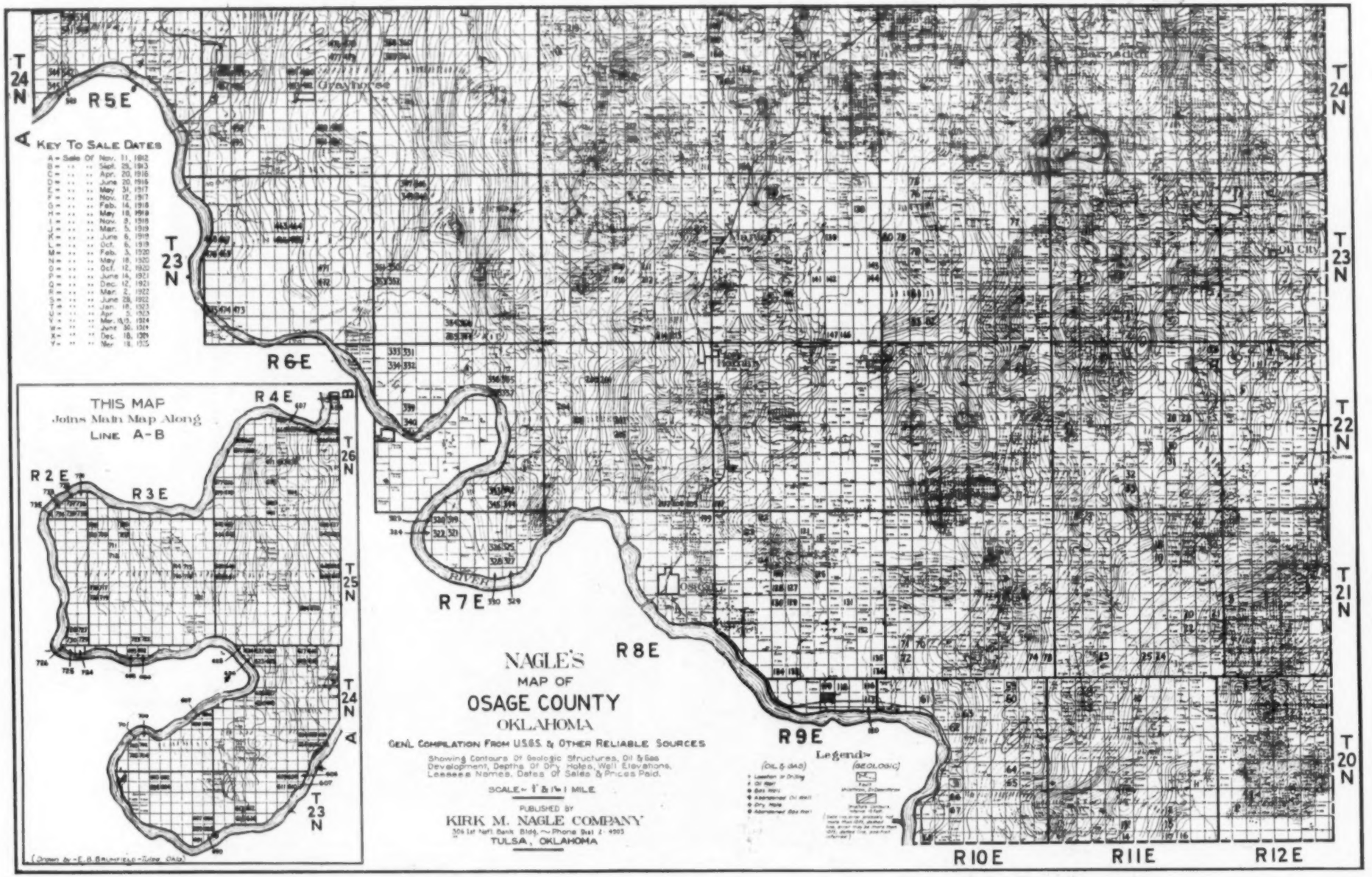
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KEY TO SALE DATES
A = Sale Of Nov. 11, 1912
B = " " " Sept. 25, 1913
C = " " " Apr. 20, 1916
D = " " " June 20, 1916
E = " " " May 31, 1917
F = " " " Nov. 12, 1917
G = " " " Feb. 14, 1918
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J = " " " Mar. 5, 1919
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U = " " " Apr. 5, 1923
V = " " " Mar. 19/5, 1924
W = " " " June 30, 1924
X = " " " Dec. 18, 1924
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NAGLE'S
MAP OF
OSAGE COUNTY
OKLAHOMA
GENL. COMPILATION FROM USGS & OTHER RELIABLE SOURCES
Showing Contours Of Geologic Structures, Oil & Gas Development, Depths Of Dry Holes, Well Elevations, Lessees Names, Dates Of Sales & Prices Paid.
SCALE- 1" = 1 MILE
PUBLISHED BY
KIRK M. NAGLE COMPANY
306 1st Nat'l Bank Bldg. — Phone Dial 2-4903
TULSA, OKLAHOMA
Legend-
(OIL & GAS)
(GEOLOGIC)

You'll NEVER GET 'STUCK' WITH AN R-B WINCH

In addition to the R-B Winch's value for heavy loading duties of all kinds, its ability to pull itself, or other trucks or tractors out of mud holes, through sand and over otherwise impassable places, more than pays for itself by this one feature alone. When you consider the many other advantages embodied in this low priced winch there can be no further question as to the greatest winch value on the market today.

THE BRADEN STEEL & WINCH COMPANY
TULSA OKLAHOMA
Sole Manufacturers

THE R-B WINCH

PRECISION

THE failure of equipment to function one hundred per cent in service does not always mean the complete failure of a major part. In many cases the trouble can be traced to small deficiencies that could, with proper care in the plant, have been prevented.

GASO craftsmen are schooled in the principle that a pump is as strong as its weakest part. Precision takes time and costs money but it pays dividends in the form of that Absolute Dependability for which GASO Pumps are known.

Write for our new 64-page catalog.

GASO PUMP & BURNER MFG. CO. · *Tulsa, Okla.*

Suggested by the "Wooden Soldier" scene in Ziegfeld Follies.

for every oil industry need

Tract
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PURCHASERS AT OSAGE SALE, MARCH 17-18

TRACTS WEST OF RANGE 7 SOLD MARCH 18th

NOTE: Passed tracts not listed.

Tract	Description		Bonus	Purchaser
150	SW 7-24-9		300	A. V. Jackson
320	NW 4-21-7		300	Gypsy Oil Co.
325	NE 11-21-7		300	Gypsy Oil Co.
326	NW 11-21-7		300	Gypsy Oil Co.
327	SE 11-21-7		9,100	Gypsy Oil Co.
328	SW 11-21-7		15,500	Gypsy Oil Co.
329	NE 14-21-7	Fr. 90.40 A.	2,200	Mariand Oil Co.
330	NW 14-21-7	Fr. 113.50 A.	2,800	Mariand Oil Co.
331	NW 5-22-7		300	Western American O. Co.
332	SW 5-22-7		300	Western American O. Co.
333	NE 6-22-7		500	I. T. I. O. Co.
334	SE 6-22-7		700	C. F. Lake et al
346	NE 5-23-7		1,500	Sinclair O. & G. Co.
347	NW 5-23-7		1,500	Sinclair O. & G. Co.
348	SE 5-23-7		2,500	I. T. I. O. Co.
349	SW 5-23-7		3,600	Phillips Pet. Co.
350	NE 19-23-7		2,200	Phillips Pet. Co.
351	NW 19-23-7		2,100	I. T. I. O. Co.
352	SE 19-23-7		1,200	A. G. Oliphant & Peters Pet. Co.
353	SW 19-23-7		1,800	Skelly Oil Co.
354	NE 33-23-7		300	Savoy Oil Co.
355	SE 33-23-7		500	Savoy Oil Co.
356	NW 34-23-7		800	Wrightsman Pet. Co.
357	SW 34-23-7		300	Savoy Oil Co.
358	NE 7-24-7		1,500	Sinclair O. & G. Co.
359	SE 7-24-7		2,400	Phillips Pet. Co.
360	NW 8-24-7		2,100	Skelly Oil Co.
361	SW 8-24-7		2,800	Mid-Kansas O. & G. Co.
362	SE 1-25-7		300	J. H. Peters
363	SW 1-25-7		300	J. H. Peters
364	NE 8-25-7		300	I. T. I. O. Co.
365	SE 8-25-7		1,100	Phillips Pet. Co.
366	NW 9-25-7		1,100	Skelly Oil Co.
367	SW 9-25-7		1,600	Mid-Kansas O. & G. Co.
368	NE 10-25-7		4,100	Mid-Cont. Pet. Corp. (Cosden)
369	SE 10-25-7		4,700	Mid-Cont. Pet. Corp. (Cosden)
370	NE 12-25-7		1,300	Skelly Oil Co.
371	NW 12-25-7		300	Savoy Oil Co.
372	NW 19-25-7		300	A. G. Oliphant & Peters Pet. Corp.
Tracts 373 to 376 were withdrawn from bidding by Osage Agency				
377	SE 31-25-7		300	Devonian Oil Co.
378	NW 32-25-7		300	Devonian Oil Co.
379	SW 32-25-7		1,300	Devonian Oil Co.
382	NE 8-26-7		300	I. T. I. O. Co.
383	NW 8-26-7		800	Phillips Pet. Co.
384	SE 8-26-7		900	Skelly Oil Co.
385	SW 8-26-7		1,900	C. F. Lake et al
389	SE 21-26-7		800	Phillips Pet. Co.
390	SW 21-26-7		1,100	Devonian Oil Co.
392	NE 28-26-7		1,200	Skelly Oil Co.
393	NW 28-26-7		1,200	Union Oil & Mining Co.
394	SW 29-26-7		300	A. G. Oliphant & Peters Pet. Corp.
407	SE 20-27-7		300	I. T. I. O. Co.
408	NW 21-27-7		300	I. T. I. O. Co.
409	SW 21-27-7		400	Phillips Pet. Co.
406	NE 20-27-7		300	I. T. I. O. Co.
432	SE 18-28-7		300	J. E. Mulligan
437	NW 26-28-7		300	C. H. Codding
438	SW 26-28-7		300	C. H. Codding
439	6E 27-28-7		300	C. H. Codding
440	SE 27-28-7		300	C. H. Codding
444	NW 36-28-7		300	C. E. Ashbrook
463	SE 9-23-6		300	Phillips Pet. Co.
464	SW 10-23-6		2,000	Skelly Oil Co.
465	NW 15-23-6		2,000	Texas Co.
466	NE 16-23-6		2,100	Prairie O. & G. Co.
467	NE 18-23-6		2,200	I. T. I. O. Co.
468	NW 18-23-6	Fr. 92.72 A.	450	Union O. & Mining Co.
469	SE 18-23-6		1,400	Amerada Pet. Corp.
470	SW 18-23-6	Fr. 125.35 A.	350	Union O. & Mining Co.
476	NE 11-24-6		11,000	Prairie O. & G. Co.
477	SE 11-24-6		7,500	Prairie O. & G. Co.
478	NW 12-24-6		10,000	Sinclair O. & G. Co.
479	SW 12-24-6		7,000	Mariand Oil Co.
480	NE 15-24-6		6,500	Mariand Oil Co.
481	NW 15-24-6		8,100	Prairie O. & G. Co.
482	SE 15-24-6		4,100	Snowden-McSweeney Co.
483	SW 15-24-6		4,600	Gypsy Oil Co.
484	NW 17-24-6		3,000	I. T. I. O. Co.
485	SW 17-24-6		2,100	Phillips Pet. Co.
486	NE 18-24-6		2,500	Prairie O. & G. Co.
487	SE 18-24-6		2,700	Mid-Kansas O. & G. Co.
488	NE 26-24-6		900	Devonian Oil Co.
489	NW 26-24-6		3,600	Phillips Pet. Co.
490	SE 26-24-6		3,700	Devonian Oil Co.
491	SW 26-24-6		3,000	Mid-Kansas O. & G. Co.
494	NE 2-25-6		15,000	Prairie O. & G. Co.
495	SE 2-25-6		16,000	Prairie O. & G. Co.
496	NW 13-25-6		3,100	Barnsdall Oil Co.
497	NE 24-25-6		1,800	Union O. & Mining Co.
498	SE 24-25-6		2,000	Prairie O. & G. Co.
499	NW 31-25-6		16,000	Gypsy Oil Co.
500	SW 31-25-6		8,100	Gypsy Oil Co.
501	SE 20-26-6		110,000	Phillips Pet. Co.
502	SE 21-26-6		321,000	Lewis Oil Co.
503	SW 21-26-6		536,000	Phillips Pet. Co.
504	NW 22-26-6		29,000	Mid-Kansas O. & Co.
505	NW 4-27-6		1,800	A. G. Oliphant & Peters Pet. Corp.
506	SW 44-27-6		1,000	C. F. Lake et al
507	SE 7-27-6		222,000	Phillips Pet. Co.
508	SW 7-27-6		420,000	Phillips Pet. Co.
509	NE 13-27-6		300	A. V. Jackson
510	SW 13-27-6		300	A. V. Jackson
511	NE 20-27-6		8,000	A. G. Oliphant & Peters Pet. Corp.
512	NE 34-27-6		300	Kewanee O. & G. Co.
513	NW 34-27-6		300	Kewanee O. & G. Co.
514	SE 34-27-6		300	Kewanee O. & G. Co.
515	SE 2-28-6		300	Phillips Pet. Co.
517	NE 8-28-6		300	I. T. I. O. Co.
522	NW 10-28-6		300	Mid-Kansas O. & G. Co.
538	NE 5-24-5		1,000	Texas Co.
539	NW 5-24-5		900	Barnsdall Oil Co.
540	SE 5-24-5		1,000	Savoy Oil Co.
541	SW 5-24-5		300	Barnsdall Oil Co.
542	NW 17-24-5	Fr. 158 A.	1,500	Barnsdall Oil Co.
543	SW 17-24-5	Fr. 46 A.	50	Barnsdall Oil Co.
544	NE 18-24-5		300	Barnsdall Oil Co.
545	SE 18-24-5	Fr. 142.4	300	Barnsdall Oil Co.
546	NE 3-25-5		300	Barnsdall Oil Co.
547	NW 3-25-5		400	Savoy Oil Co.
548	SE 3-25-5		300	Barnsdall Oil Co.
549	SW 3-25-5		300	Barnsdall Oil Co.
551	SW 16-25-5		300	Barnsdall Oil Co.
555	SW 19-25-5		300	Barnsdall Oil Co.
556	NW 26-25-5		5,100	Barnsdall Oil Co.
557	SW 26-25-5		500	Gypsy Oil Co.
558	NE 27-25-5		8,200	Gypay Oil Co.
559	SE 27-25-5		4,300	Gypay Oil Co.
562	NE 36-25-5		12,000	Gypsy Oil Co.
563	SE 36-25-5		16,000	Gypsy Oil Co.
564	NE 6-26-5		1,000	A. G. Oliphant & Peters Pet. Corp.
565	NE 6-26-5		300	Jess Moore
566	NW 6-26-5		300	Jess Moore
567	SE 6-26-5		2,200	Barnsdall Oil Co.
568	SW 6-26-5		4,000	Barnsdall Oil Co.
571	NW 26-26-5		400	Texas Co.
572	SW 26-26-5		300	Geo. Faulton
573	SW 26-26-5		300	Geo. Faulton
579	SW 1-27-5		710,000	Phillips Pet. Co.
580	NE 2-27-5		366,000	Phillips Pet. Co.
581	NW 2-27-5		68,000	Skelly Oil Co.
582	NE 3-27-5		6,500	Texas Co.
583	NE 12-27-5		625,000	Phillips Pet. Co.
584	NE 27-27-5		1,100	Mid-Kansas O. & G. Co.
585	NW 2-28-5		12,000	Mid-Kansas O. & G. Co.
607	SW 2-23-4	Fr. 17.55 A.	25	W. S. Crow et al
610	SE 3-23-4	Fr. 153.0	300	W. S. Crow
627	NE 16-24-4		300	Barnsdall Oil Co.
628	NW 16-24-4	Fr. 126.60 A.	300	Barnsdall Oil Co.
629	SE 16-24-4		800	I. T. I. O. Co.
630	SW 16-24-4		300	Barnsdall Oil Co.
633	NE 26-24-4		300	Barnsdall Oil Co.
634	NW 26-24-4		300	Barnsdall Oil Co.
635	SE 26-24-4	Fr. 155.30 A.	300	Barnsdall Oil Co.
636	SW 26-24-4		300	Barnsdall Oil Co.
655	NE 1-26-4		75	Jess Moore
661	SE 11-26-4	Fr. 71.45 A.	70	Skelly Oil Co.
663	SE 12-26-4		300	Skelly Oil Co.
664	SW 12-26-4	Fr. 132-53	300	Skelly Oil Co.
665	NE 13-26-4		350	Skelly Oil Co.
666	NW 13-26-4		300	Skelly Oil Co.
680	NE 13-23-3		300	I. T. I. O. Co.
687	NW 13-23-3		300	I. T. I. O. Co.
688	SE 13-23-3	Fr. 158.56 A.	300	I. T. I. O. Co.
689	SW 13-23-3		300	I. T. I. O. Co.
690	NE 24-23-3	Fr. 42.05 A.	50	I. T. I. O. Co.
691	NW 24-23-3	Fr. 120.9 A.	300	I. T. I. O. Co.
692	NE 4-24-3		300	I. T. I. O. Co.
694	SE 4-24-3	Fr. 23.4 A.	25	Joe Berry
695	SW 4-24-3	Fr. 22.4	25	Joe Berry
701	NW 28-24-3	Fr. 11.00 A.	15	W. S. Crow

TRACTS EAST OF RANGE 7 SOLD MARCH 17th—All tracts omitted were passed by purchasers.

Tract	Description	Bonus	Purchaser
1	NW 29-20-12	$ 900	B. C. Conner et al
2	SE 30-20-12	800	James A. Kennedy
3	NW 19-21-12	300	Kewanee O. & G. Co.
4	NE 5-22-12	300	T. K. Smith, Tulsa
6	NW 21-27-12	300	John W. Dyson
8	NW 19-29-12	1,100	T. O. Lillystand
9	SW 30-29-12	300	A. D. Simon
10	SW 2-20-11	300	Grimes & Elliott
11	SW 24-20-11	700	J. W. Allen et al
12	SW 26-20-11	300	Devonian Oil Co.
13	NE 33-20-11	300	Sand Springs Home
14	SE 33-20-11 Fr. 102.81 A.	300	Sand Springs Home
15	NW 35-20-11	300	Devonian Oil Co.
16	SE 35-20-11 Fr. 107.46 A.	300	Devonian Oil Co.
17	SW 35-20-11 Fr. 107.28 A.	300	Devonian Oil Co.
18	NE 10-21-11	300	Grimes & Elliot
20	SE 23-21-11	300	Devonian Oil Co.
21	SE 24-21-11	1,400	Kewanee O. & G. Co.
22	NE 26-21-11	2,000	John Easley
24	NE 34-21-11	400	John Easley
25	NW 34-21-11	400	John Easley
28	SE 14-22-11	600	J. N. Winemiller
29	SW 14-22-11	600	J. N. Winemiller
30	SW 23-22-11	500	Ray Branstetter
31	NW 26-22-11	1,300	Ray Branstetter
32	SE 28-22-11	300	Devonian Oil Co. et al
33	NE 33-22-11	3,100	Devonian Oil Co. et al
39	NW 35-25-11	300	Devonian Oil Co. et al
40	SW 35-25-11	300	Devonian Oil Co. et al
41	NE 35-26-11	300	Phillips Pet. Co.
43	SE 35-26-11	300	Phillips Pet. Co.
44	SW 35-26-11	300	Phillips Pet. Co.
45	NW 10-27-11	600	C. O. Ross
46	SW 10-27-11	1,000	C. O. Ross
47	NW 15-27-11	1,000	C. O. Ross
49	NE 10-28-11	300	New Eng. O. & P. L. Co.
50	NW 11-28-11	1,500	New Eng. O. & P. L. Co.
51	NW 13-28-11	300	I. T. I. O. Co.
54	SW 30-28-11	300	C. O. Ross, Coffeyville, K.
55	NW 31-28-11	300	C. O. Ross, Coffeyville, K.
57	NE 24-29-11	1,100	T. O. Lillystrand
58	SE 25-29-11	300	A. D. Simon
59	NE 2-20-10	300	Grimes & Elliott
60	SE 2-20-10	300	James A. Kennedy
61	SE 5-20-10	900	J. H. McElroy, Pawhuska
63	NW 10-20-10	600	Sand Springs Home
64	NE 23-20-10	300	Sand Springs Home
65	SE 23-20-10	300	Sand Springs Home
66	NE 28-20-10	2,800	Blackwell O. & G. Co.
67	SE 28-20-10	300	D. F. Millard
68	SE 33-20-10 Fr. 89.35 A.	3,900	Gled O. & G. Co. et al
69	SE 10-21-10	6,200	Mid-Kansas O. & G. Co.
77	SE 11-23-10	300	Ray Branstetter
78	SW 17-23-10	300	New Eng .O. & P. L. Co.
82	NE 32123-10	300	Superior Oil Corp.
83	NW 32-23-10	300	Union O. & Mining Co.
84	SW 13-26-10	6,800	Amerada Pet. Corp.
85	SE 14-26-10	2,200	Phillips Pet. Co.

Tract	Description		Bonus	Purchaser
89	SW 20-26-10		300	R. E. Seamans
90	NE 23-26-10		2,400	Phillips Pet. Co.
95	SW 30-26-10		900	Texas Co.
96	NE 3-28-10		1,200	M. F. Breene
97	NE 15-28-10		300	R. E. Seamans
98	SW 15-28-10		1,100	Winona Oil Co.
106	NE 14-29-10		300	R. E. Seamans
107	SE 14-29-10		300	R. E. Seamans
108	NW 15-29-10		300	Blackwell O. & G. Co.
109	SW 15-29-10		300	R. E. Seamans
112	SE 27-29-10		800	R. E. Seamans
117	SE 1-20-9		300	John Easley
120	NE 12-20-9	Fr. 54 A.	160	John Easley
121	SW 3-21-9		700	Ohio-Osage O. Co.
123	SW 5-21-9		300	A. J. Wright.
124	SE 8-21-9		300	A. G. Oliphant
125	NE 15-21-9		1,100	Phillips Pet. Co.
126	NW 16-21-9		300	Ohio-Osage O. Co.
127	SE 16-21-9		300	Ohio-Osage O. Co.
128	SW 16-21-9		300	Ohio-Osage O. Co.
129	NE 21-21-9		1,700	A. G. Oliphant & C. B. Peters
130	NW 21-21-9		600	Ohio-Osage O. Co.
132	NW 25-21-9		300	Devonian Oil Co.
133	SE 33-21-9		300	Devonian Oil Co.
134	SW 33-21-9		300	Devonian Oil Co.
137	SW 31-22-9		400	A. G. Oliphant & C. B. Peters
138	NW 12-23-9		300	A. G. Oliphant & C. B. Peters
140	SW 18-23-9		2,100	Peters Pet. Corp.
141	SE 22-23-9		1,000	R. E. Seamans
142	SW 23-23-9		300	R. E. Seamans
145	NE 28-23-9		300	I. T. I. O. Co.
153	NW 17-24-9		1,300	A. G. Oliphant & C. B. Peters
154	NW SW 17-24-9	Fr. 40 A.	3,800	Ernest McCarty
155	SE 18-24-9		3,900	Ernest McCarty
156	SW 33-24-9		4,100	A. G. Oliphant & C. B. Peters
157	SW 2-25-9		300	Garnett Oil Co.
158	SE 3-25-9		300	Garnett Oil Co.
159	SW 8-25-9		800	A. G. Oliphant
160	NE 20-25-9		300	A. M. Landon
163	NW 30-25-9		2,000	New Eng. O. & P. L. Co.
165	SE 31-25-9		3,000	Barnsdall Oil Co.
163	SW 31-25-9		1,400	I. T. I. O. Co.
180	NW 18-27-9		300	I. T. I. O. Co.
196	NE 21-29-9		2,000	Wah-Sha-See Oil Co.
199	NE 1-31-8		300	A. V. Jackson
204	NE 18-22-8		300	Peters Pet. Corp.
206	SE 35-22-8		20,500	Skelly O. Co. & Oklavania Oil Co.
207	SW 35-22-8		4,000	Skelly O. Co. & Oklavania Oil Co.
208	SW 36-22-8		28,000	Mid-Kansas O. & G. Co.
209	NE 21-23-8		2,800	Barnsdall Oil Co.
210	SE 21-23-8		4,100	Beacon Oil Co.
211	NE 22-23-8		500	Barnsdall Oil Co.
212	SE 22-23-8		300	Barnsdall Oil Co.
215	SW 5-24-8		17,000	Amerada Pet. Corp.
216	SW 12-24-8		4,500	Texas Co.
220	NE 10-25-8		6,600	Wrightsman Pet. Co.
221	NW 10-25-8		1,500	Wrightsman Pet. Co.
223	NE 16-25-8		300	A. G. Oliphant
224	NW 16-25-8		300	A. G. Oliphant
225	NW 27-25-8		300	A. V. Jackson
227	SW 29125-8		37,000	Texas Co.
228	NE 30-25-8		29,000	Lewis Oil Co.
236	NW 13-26-8		2,100	A. G. Oliphant
237	SW 13-26-8		300	Pat Henry & M. O. Blevenson
242	NE 23-26-8		300	Petroleum Drilling Co.
244	SW 25-26-8		300	Petroleum Drilling Co.
247	NE 31-26-8		300	New Eng. O. & P. L. Co.
248	SW 31-26-8		800	New Eng. O. & P. L. Co.
273	SE 3-28-8		300	Beacon Oil Co.
285	NW 16-28-8		800	Beacon O. Co. & I. T. I. O. Co.
286	SE 18-28-8		300	Superior Oil Corp.
287	NW 20-28-8		1,200	Superior Oil Corp.

Forty Active Operations on Wells In New Arkansas Field

El Dorado, Ark.—In reviewing the developments of the week at Lisbon, the new field between El Dorado and Smackover, in Union County, one is impressed with the realization that a new oil boom has burst. The field as a whole is producing from 4000 to 4500 barrels per day from two dozen wells, one of which is accounting for 1500 barrels of clean oil per day. Rig builders and drilling crews are actually at work on more than forty new wells, and every day brings fresh impetus to the development campaign.

Wingfield et al's No. 2 Slaughter, located 200 feet west and 175 feet north of the southeast corner of the N½ NW¼ SE¼ of section 9-17-16, is the most spectacular of the new wells. It was brought in on Wednesday of last week with an initial flow estimated at 800 barrels of oil per day from 15 feet of broken sand at a total depth of 2093 feet. It caught fire within three hours after it came in, and the derrick was lost, although the well was saved. A new derrick having been built, it was reopened yesterday and resumed flowing at the rate of 1500 barrels of pipe line oil per day.

Olvey & Jones brought in their Slaughter No. 4 as an 800-barrel well from 21 feet of broken sand at a total depth of 2099 feet. Location is in the northeast corner of the S½ NW¼ SE¼, offsetting the Wingfield well on the south. Miller and Cottingham got a 400-barrel flow in their Slaugher No. 1, which is located near the southeast corner of the W½ NW¼ NE¼ of section 9-17-16, thus extending the field about one fourth of a mile north from the nearest production. Their well was finished in 20 feet of sand at a total depth of 2097 feet.

The Lion Oil and Refining Company's Goodwin No. 2, which is located near the southern boundary of the proven area, at a point near the northeast corner of the SE¼ NW¼ of section 16, was finished with an initial flow of 125 barrels per day through two-inch tubing. It was drilled 22 feet into a broken sand at a total depth of 2108 feet. Several other wells, ranging from 15 to 150 barrels per day in initial production, were also brought in last week, as may be noted from the current report of completions.

Caddo Deep Well

Operators from Louisiana, who visited the Lisbon field in considerable number last week, bring news of the completion of another deep-sand oil well in the Pine Island district, Caddo Parish. The Dixie Oil Company's Noel B-2, which is located in section 13-21-15, near the deep-sand discovery wells, was brought in about two weeks ago as a large gasser, spraying oil, form a total depth of 3632 feet. It bridged over and went dead, was cleaned out and reopened, and came in again last week making around 1500 barrels of light oil per day. Salt water made its appearance after a few hours, and it is now making only about 15 per cent oil, although it is still making about the same quantity of fluid. It is flowing through a half-inch choke into a separator.

The completion of this well appears to have some effect on the flow from the Dixie Company's Robertshaw No. 53, which has increased its flow from 2000 to 3500 barrels of fluid per day, of which about 25 per cent is oil. The temperature of the fluid from both wells has risen rapidly during the last few days, that of the older well showing 126 degrees F. and of the younger 106 degrees F. The Robertshaw well has been averaging in excess of 500 barrels net oil per day for nearly four months.

The Ohio Oil Company is drilling and coring at 4015 feet and 3830 feet, respectively, in its Ardis No. 1 and E. K. Smith No. 18, which are located in sections 1 and 12 of township 21-15. There are an even dozen deep tests now in progress in the Caddo district. The Dixie, Fortuna, Gulf, Ohio and Texas companies are all competing in the race for deep-sand production.

The Fortuna Oil Company is preparing to set a string of six-inch casing to test a show of gas at around 4281 feet in its Bible wildcat, in section 8-20-9, southeast of the Cotton Valley field, in Webster Parish. The Ohio Oil Company is drilling at 4735 feet in its Cox deep test, near the Davis discovery well, in section 23-21-10, of the Cotton Valley field. The Davis well is still producing natural gasoline, in quantity sufficient to rival the famous "gasoline well" of Pine Island.

D. C. Richardson's discovery well in section 13-20-15, near Belcher and Dixie, has been yielding around 40 barrels of clean 27-gravity oil per day, on the pump.

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and seal its power

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AVERAGE DAILY PRODUCTION FOR U.S.

United States Daily Average Production by Weeks

Figures below are taken from the complete revised estimates of the AMERICAN PETROLEUM INSTITUTE except for the current week, which are advance estimates issued by the A. P. I. and are subject to revision:

Week Ending	Oklahoma	Kansas	Texas (Outside Gulf Coast)	Gulf Coast	North Louisiana	Arkansas	Eastern States	Rocky Mountain	California	United States Total
January 2, 1926	463,500	102,850	276,700	90,250	44,950	196,050	103,500	105,350	633,000	2,002,250
January 9	449,750	99,950	261,700	88,100	44,200	184,150	101,000	105,950	629,000	1,963,800
January 16	447,750	100,400	258,650	88,750	43,500	184,250	100,500	104,300	619,500	1,947,600
January 23	442,450	98,400	255,300	93,050	43,900	182,000	100,500	99,700	613,000	1,928,350
January 30	443,400	99,050	248,550	91,300	43,400	159,500	99,500	96,200	612,000	1,892,900
February 6	445,750	100,650	246,150	91,550	44,300	171,650	99,500	98,700	608,000	1,906,250
February 13	449,000	101,250	243,600	90,950	43,400	170,150	99,000	98,650	606,500	1,902,500
February 20	450,000	102,600	243,100	90,100	44,600	169,900	99,000	99,950	603,500	1,902,750
February 27	455,400	103,250	251,100	93,600	48,150	167,000	98,500	96,350	603,000	1,927,050
March 6	453,150	103,950	258,100	90,850	49,450	163,900	98,000	103,900	599,000	1,920,300
March 13	452,700	103,350	262,350	95,300	48,650	164,200	97,500	103,750	607,500	1,935,200
March 20	451,350	102,850	260,300	94,450	48,700	165,100	97,500	101,700	607,000	1,928,950
Increase over previous week	.....	.....	.....	.....	50	900	.....	.....	.....	.....
Decrease over previous week	1,350	500	2,050	550	.....	.....	.....	2,050	500	6,250

Texas

NORTH TEXAS

	Mar. 20	Mar. 13
Burkburnett	12,600	12,500
Electra	16,450	16,750
Iowa Park and K-M-A	4,450	5,550
Wilbarger	12,500	11,900
Panhandle	5,700	6,200
Petrolia	450	350
Archer County	29,700	29,200
Others	1,400	1,000
Totals	83,250	83,450

EAST CENTRAL TEXAS

Mexia	12,950	13,150
Currie	1,100	1,100
Richland	2,300	2,250
Corsicana-Powell	32,100	31,900
Wortham	10,500	10,800
Total	58,950	59,200

WEST CENTRAL TEXAS

Stephens County	13,800	13,600
Eastland County	5,950	5,900
Desdemona	2,100	2,100
Young County	8,650	8,400
Palo Pinto County	400	400
Callahan County	3,900	4,300
Shackelford County	2,100	2,800
Reagan County	31,600	32,200
Others	9,500	10,550
Totals	78,000	82,250

SOUTHWEST TEXAS

Luling	22,050	22,650
Mirando	7,200	6,100
Somerset	2,250	2,300
Lytton Springs	7,700	7,650
Piedras Pintas	150	200
Others	750	750
Totals	40,100	39,650
Texas outside Gulf Coast	260,300	262,550

GULF COAST

Goose Creek	10,250	10,350
Hull	16,100	17,150
Saratoga	1,300	1,200
Blue Ridge	650	700
Damon Mound	950	950
Batson	1,350	1,100
West Columbia	9,950	9,400
Humble	4,850	4,800
Pierce Junction	1,400	1,250
Sour Lake	4,050	4,050
Spindletop	2,500	2,550
Orange County	16,650	16,650
Edgerly	1,150	1,150
Evangeline	1,100	1,100
Vinton	6,400	6,400
Lockport	2,700	2,450
South Liberty	7,050	7,350
Big Creek	1,350	1,100
Boling	2,850	3,250
Others	1,850	2,050
Totals	94,450	95,000

Oklahoma

North Braman	2,350	2,550
South Braman	12,450	10,800
Blackwell	3,600	3,300
Hubbard	2,000	1,800
Thomas	7,050	7,350
Tonkawa	41,900	43,150
Garber	24,200	23,050
Burbank	43,850	44,700
Osage (Outside Burbank)	33,100	33,050
Watchorn	2,750	2,800
Cushing	22,450	22,500
Yale Jennings	16,050	16,000
Davenport	21,650	22,450
Bristow-Slick	31,450	31,500
North Okmulgee	18,100	18,150
Lyons-Deaner	4,300	4,300
Stroud	2,450	2,400
Cromwell	18,550	19,200
Papoose	12,900	13,300
Wewoka	16,500	16,700
Duncan District	7,500	7,550
Graham	9,350	9,350
Fox	3,750	3,750
Healdton	14,950	14,950
Hewitt	12,200	12,250
Others	65,950	65,700
Totals	451,350	452,700

California

Santa Fe Springs	50,000	50,000
Long Beach	110,500	110,000
Huntington Beach	44,400	45,000
Torrance	28,000	28,000
Dominguez	20,000	21,500
Rosecrans	21,500	21,500
Inglewood	51,500	51,500
Midway-Sunset	93,000	92,000
Others	188,500	187,500
Totals	607,000	607,500

North Louisiana

Homer	5,950	5,850
Haynesville	10,400	10,400
Caddo Light	9,300	8,850
Caddo Heavy	2,200	2,150
De Soto-Red River	3,800	4,050
Elm Grove	650	500
Bellevue	2,500	2,550
Cotton Valley	8,300	8,450
Urania	5,700	5,850
Total	48,700	48,650

Kansas

	Mar. 20	Mar. 13
Florence-Covert	1,750	1,750
Peabody-Ebling	4,500	4,500
Eldorado-Towanda	14,150	14,150
Augusta-Fox Bush	4,950	4,950
Rainbow Bend	4,800	4,850
Russell	5,350	5,450
Greenwood County	41,650	41,800
Others	25,700	25,900
Total	102,850	103,350

Arkansas

El Dorado	7,550	7,600
Smackover Light	18,500	18,250
Smackover Heavy	133,200	133,300
Stephens	1,550	1,550
Nevada	2,000	2,150
Lisbon	2,300	1,300
Total	165,100	164,200

Mountain States

WYOMING

Salt Creek	52,700	53,500
Grass Creek	2,700	2,850
Elk Basin	650	700
Big Muddy	3,450	3,450
Lost Soldier	4,250	4,250
Rock River	3,100	3,050
Teapot Dome	1,250	1,500
Others	4,950	4,950
Total	73,050	74,250

MONTANA

Cat Creek	2,950	2,950
Sunburst	14,500	15,450
Totals	17,450	18,400

COLORADO

Moffats (Craig)	3,850	3,850
Fort Collins	2,450	2,400
Florence	400	400
Others	550	550
Totals	7,250	7,200

NEW MEXICO

Artesia	3,050	3,000
Hogback	500	500
Rattlesnake	400	400
Totals	3,950	3,900
Total Rocky Mountain	101,700	103,750

EASTERN STATES

(Including Ill., Ind., Ky., Pa., Ohio, W. Va. and N. Y.)	97,500	97,500

PRODUCTION SUMMARY

East of Rockies	1,120,250	1,224,050
United States	1,928,950	1,935,300

COMPLETIONS FOR PAST WEEK IN U.S. FIELDS

Texas

Company, Well and Location	Initial Production Bbls.	Depth
Archer County—		
Atlantic Oil Prod. Co. L. F. Wilson 11-C	*	1605
Barkley-Meadows et al L. F. Wilson 22	80	1530
Burns-Maxson & Humble Ella Brown 7	50	1588
Burns-Maxson et al A. P. Jackson 3	*	1565
Creath-Gohlke et al S. Humphrey 1	*	1700
Fisher-Gilliland et al Rogers 8	50	1371
Gulf Prod. Co. C. B. Abney 1	9	1766
B. R. Jeske 1	300	1177
L. W. McCrory 1-F	*	1752
L. Kunkel 7	*	1202
M. W. Jackson 2-A	85	1654
M. W. Jackson 3-A	40	1564
L. C. Herron 1	*	1622
A. P. Nichols 28	60	1559
L. W. McCrory 5-C	50	1396
Power Banking Co. 3	45	1406
Ted Harris et al Dycus 1	*	1520
W. D. Hill et al Hutcherson 1, dd	200	1382
Hutcherson 5	35	1399
Hammond et al Neal 1	*	1215
Humble O & R Co. Hamilton 6	35	1232
D. L. Wolf 1	115	1347
Ilseng Prod. Co. Prideaux (Sec. 14) 5	*	675
Prideaux (Sec. 16) 1	†	300
McCarty Oil Co. L. F. Wilson 21-B	50	910
M. & V. Oil Co. Kunkel 6	35	1175
Meyers-Blevins et al McMurtry 1	*	1055
Pandem Oil Corp. Young 5	30	1454
Prairie O. & G. Co. Kreager 5	5	1419
Pioneer Ref. Co. & Beasley D. L. Wolf 1	200	1356
R. W. Ramming et al Parrish 1	*	1611
RMF Oil Corp. L. F. Wilson 1	*	1581
Shasta Oil Co. Mangold J	6	663
Mangold 2	8	657
Mangold 3	10	656
Mangold 4	15	658
Mangold 5	10	657
Mangold 7	13	656
Staley-Wynne et al Parrish 7-B	75	1584
Shaw-Rathke et al Hayter 6-A	*	1352
Hausler 1-D	*	1250
Spoonts-Cook-McElreath et al Megargel Townsite 1	*	1500
Texhoma O. & R. Co. D. L. Wold 2-A	10	1067
F. S. Whitman et al A. D. Britton 1	*	1809
W. C. Young et al C. B. Abney 2	25	1757
South Vernon District—		
Barkley-Meadows et al Bond 2	*	2500
W. H. Stephens 6-B	30	2396
W. W. Graham-Schoonmaker et al George 1	15	2227
Humble O. & R. Co. Stephens 23, dd	35	2110
Stephens 42	50	2400
Stephens 43	65	2406
Waggoner 3-M	255	1905
Waggoner 3-O	35	1908
Waggoner 4-O	200	1909
Landreth Prod. Corp. Waggoner 3-CC	125	1899
McCamey-Sherrin & Lucey Stephens 8, dd	*	360
Stephens 33	200	1268
Milham Corp. Waggoner 1-B	20	2408
Waggoner 2-B	55	2430
Prairie O. & G. Co. Waggoner 2-A	50	2350
Shamrock Oil Co. Waggoner 1-K	50	2334
Waggoner 1-W	15	2378
Wichtex Oil Co. Waggoner 1	*	1193
G. C. Wood et al McGill 1	†	955
BROWN COUNTY		
Barnet Carter et al Church Lot 1	100	1126
J. S. Cosden Inc. Gafford 9	15	1256
Danciger et al Eddington 2	15	1267
Dozier-Mulloy et al Byrd 2	*	1530
McLester Oil Co. Clark 5	50	1225
Mahlstedt Oil Co. Eddington 1	*	1278
Schaffner-Wilson et al Prather 7	5	1313
E. L. Smith Oil Co. B. F. Dunn 1	1680	1126
Stone & Co. Gunn 6	40	1219
BAYLOR COUNTY		
Magnolia Pet. Co. W. H. Portwood 4	*	2090
Roxana Pet. Corp. Alexander 1	*	1652
CLAY COUNTY		
The Texas Co. Morgan Jones 4	*	1010
CALLAHAN COUNTY		
Kirk-Brewer et al Harlow 1	*	1830
So. Pet. & Exploration Co. Smart 1	*	2470
Wakefield et al Herrington 1	35	1418
COLEMAN COUNTY		
Cranfill-Reynolds et al Parsons 1	*	700
Moore et al Sackett 1	*	1950
Pandem Oil Corp. Mitchell 1	*	1604
COLLIN COUNTY		
Heartwell Synd. Anderson 1	*	3004
EASTLAND COUNTY		
Bateman-Campbell et al Motes 1	15	3210
Cranfill-Reynolds et al Collins 1	*	1483
BURKBURNETT		
Cooper et al L. Morgan 14	†	650
L. Morgan 15	*	965
Magnolia Pet. Co. SLC Ramming 18	8	1304
SLC Ramming 19	18	1295
SLC Pratt 15	19	981
ELECTRA		
Bullington-Lee & Pendleton et al Jennings 15	200	1609
Gulf Prod. Co. J. F. Miller 4-A	*	1754
J. L. Waggoner et al 1-D	30	575
J. L. Waggoner 4-F	25	1296
John Hooser et al Hines 2	*	1416
Maer-Staniforth et al Hines 1	*	2023
John O'Neil et al Roberts 1	*	2138
Perkins-Cullum et al Beaver-Electra 7	*	1950
Petroleum Prod. Co. Hines 1	*	1710
Ryan Pet. Corp. G. E. Nance 54	90	1321
G. E. Nance 55	25	490
G. E. Nance 65	70	1322
K-M-A AND IOWA PARK		
Petroleum Prod. Co. A. & K. 19-B	*	1769
White Bros. et al Mitchell 2-B	35	1523
MONTAGUE COUNTY		
Gulf Prod. Co. R. W. Cunningham 1	90	975
HASKELL COUNTY		
H. H. Adams et al Proctor 1	*	2750
PALO PINTO COUNTY		
Ochiltree et al Hinkson 1	*	677
SHACKELFORD COUNTY		
Hoffman-Fagan et al Moberly 1	*	1360
Hope Pet. Co. Newell 1	*	2530
Riley et al Elliott 1	*	1590
Spoonts et al Poindexter 2	*	603
The Texas Co. Green 1	*	1880
STEPHENS COUNTY		
Humble O. & R. Co. Smith 5	5	1733
Landreth Prod. Corp. Gratz 3	75	3236
States Oil Corp. Hawkins 2	*	3865
THROCKMORTON COUNTY		
Murchison-Fain Oil Co. Portwood 1	*	1351
Texhoma O. & R. Co. Reynolds 3	*	3443
YOUNG COUNTY		
Pierce-Pollin et al Teague 1	*	1003
Carter et al Benson 4	60	927
Hoffer Oil Corp. Boyd 1	*	1204
McElreath-Suggett et al Freeman 1	*	1125
Prairie O. & G. M. Boren 4-A	125	1072
Underwood Drilling Co. Benson 2	20	879
GULF COAST		
Spindletop—		
Gulf Prod. Co. Gladys 212	25	875
Gladys 221	100	825
Batson—		
Gulf Prod. Co. Wing 165	10	1125
Navarro Oil Co. Autrey 1	*	4250
Acorn Oil Co. Paraffine 60	10	1100
Paraffin Oil Co. Paraffine 65	8	1050
Sour Lake—		
The Texas Co. Fee 263	30	1800
Lake View Oil Co. Hardin County 46	100	1340
Hull—		
Gulf Prod. Co. Phoenix Dev. Co. 64	125	3300
Scarborough 12	1800	3950
West Columbia—		
Humble O. & R. Co. Smith 2	10	3500
Pierce Junction—		
H. R. Cullen Howe 7	100	3960
Big Creek—		
Gulf Prod. Co. T. W. Davis 20	*	3750
Orange—		
Rycade Oil Corp. State B-11	540	4650
Boling—		
The Texas Co. Taylor 6	700	3100
Murchison & Fain Floyd 2	*	1125
Atlantic O. P. Co. Taylor 5	*	....
Goose Creek—		
Gulf Coast Oil Corp. Gaillard 6	*	3425
Vinton—		
Gulf Ref. Co. of La. G&MG 65	*	2350
Edgerly Pet. Co. Vincent 6	25	3300
Evangeline—		
Gulf Ref. Co. of La. Jennings-Clement 38	15	1650
Lockport—		
Vacuum-Gulf Prod. Co. Bordages 2	300	3760
Miller 6	3300	4457
Richland—		
Sun Co. E. Swink A-2	*	1200
Powell—		
Eureka Oil Operators Fullwood 1	*	900
Bob Penn et al Burke 1	*	3350

Oklahoma

Company, Well and Location	Initial Production Bbls.	Depth
Carter County—		
Skelly Oil Co. Davis 1, C NE SW NW 23-2s-3w, owd	25	2400
Atlantic Oil Producing Co. Cobb 3, SWc NW 5-3s-2w	50	3329
Comanche County—		
Magnolia Pet. Co. School 10 No. 1, C NE NE NE 36-2n-10w	75	1645
Creek County—		
Waite Phillips Alec 3, NWc NE SE 27-17-8e	1383	3131
Olean Pet. Co. Washington 2, SEc SW 27-17-8e, owd	5	2378
C. G. Tibbens Sewell 3, SEc NE 34-15-8e	30	2493
Texas Co. Bruner 3, NEc SW SE 12-14-8e	127	2413
Kennedy et al Strip 4, NEc SE NE NW 6-18-12e	160	2039
C. G. Tibbens Unallotted 18, C W L NE SW 30-15-9e	25	2295
21, SEc NE SE NW 30-15-9e	197	1235
Terrell Oil Co. Collins 2, NEc SE 8-18-11e, owd	*	2100
Caskey & Agnew Townlot 1, NWc NE 6-18-12e	*	2072
J. H. Wright Dawson 8, C N L NE SW 24-17-10e	*	1880
L. McClung et al Harris 1, C W L SW NW 27-17-11e.	*	1875
Garfield County—		
D. W. Franchott Lynds 16, SWc 7-22-3w	434	4440
Sinclair Oil & Gas Co. Hartly 26, C SW NW NW 18-22-3w	7140	2735

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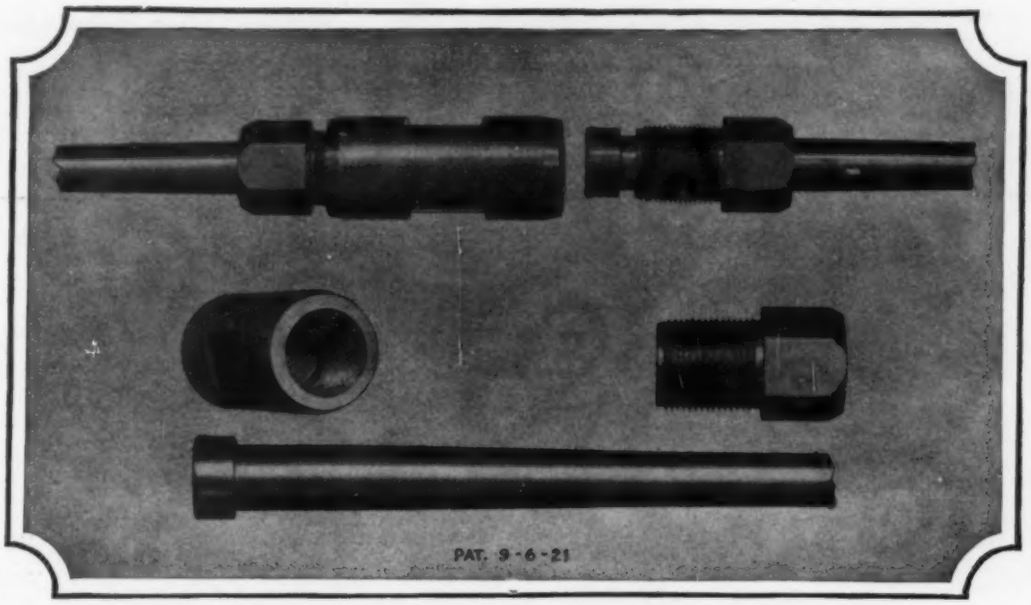

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"Columbus" SUCKER RODS

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Company, Well and Location	Initial Production Bbls.	Depth
Grady County—		
Public Utilities Clark & Cowden W. E. Smith 1, C SE SE 12-6n-7w ..	*	3008
Hall & Briscoe Mieur 1, C SE SE 23-4n-8w	*	3350
J. T. Ridley 1, C SE NE 26-4n-8w	*	....
Hughes County—		
T. B. Slick Polk 3, C NE NE NE 10-9-9e	60	3317
Ramsey & Dempsey L. Bowlegs, C SE SW SW 23-9-9e	*	3435
Kay County—		
Prairie Oil & Gas Co. F. M. Jones 4, NWc SW NW NW 10-27-1w..	¶25	3441
Comar Oil Co. Duncan 8, NWc SE SW 21-29-1w	287	2090
9, NWc SE SW 21-29-1w	275	2083
Harvell 7, SEc SW NE 21-29-1w.	142	2106
Biddle 3, SEc NE SW 5-28-1w..	2746	2378
Lincoln County—		
Magnolia Pet. Co. A. E. Sproleder SEc NW SE 34-15-5e	125	3432
M. & F. Sproleder, NEc SE SE 34-15-5e	80	3414
Pure Oil Co. Jefferson 6, C NW SW SW 35-15-5e	255	3404
Skelly Oil Co. Ford 4, SEc NE 7-15-6e	672	4093
Hopkins 7, SEc NE 2-14-5e	180	3408
Amerada Pet. Corp. Hopkins 2, SWc NE SE 2-14-5e	250	3378
Belless 5, SWc NW SW 3-14-5e..	300	3463
Belless 6, SEc NW SW 3-14-5e..	280	3456
Carter Oil Co. Tuttle 6, SEc NE NE 2-14-5e	58	3420
Shaffer Oil & Ref. Co. Nickel 3, SWc NE NE 10-14-5e.....	25	3410
Gypsy Oil Co. Caves 5, SWc NW NW 11-14-5e	50	3383
Caves 9, SWc NE NW 11-14-5e ..	840	3384
Caves 10, SEc NE NW 11-14-5e..	610	3370
Southwestern Pet. Corp. Robertson 2, SWc NW NE 11-14-5e	450	3388
Prairie Oil & Gas Co. Spoleder 3, NEc SW 35-15-5e	450	3370
Okfuskee County—		
Independent Oil & Gas Co. Carolina 3, NWc SW SW 33-12-11e.....	360	3655
Atlantic Oil Producing Co. Jefferson 8, C SW NW 16-11-11e	75	2760
Windsor Oil Co. Holmes 7, C SW NE NW 22-11-11e.....	640	2504
McCarty et al Fisher 1, C SE SW NE 8-10-12e	*	3400
Muskogee County—		
J. A. Shepard S. Peters SWc NW SW 26-13-16e.	*	2753
Noble County—		
Comar Oil Co. Pettit 11-W, SEc NE NE, owd	*	4666
Okmulgee County—		
Carter Oil Co. 44 1-B, SEc NW SE 9-15-12e	30	2677
Morton & Co. Turner 2, C S L NW NE 7-12-12e	150	2604
Simms Oil Co. Rentie 14, C N L SW NW 31-12-12e	90	2568
Arksarbon Oil Co. A. Harris 7, C S L SE NE 1-14-14e	9	1040
Mechling V. Colbert 2, NWc NE NE 14-14-14e	20	1110
J. L. Powell H. Sells 6, C W L NW SW 9-14-15e	25	1602
E. J. Lambert Segro 4, C E L SW NW 20-13-15	¶⅛	752
Pulaski Oil Co. Flusche 9, SEc NW SW 36-12-13e	5	2908
W. B. Pine J. Hawkins 3, C NW SW 20-12-14e	¶1½	2230
Texas Oil Co. Ard 1, NWc SW 22-14-12e	*	2702
J. M. Pine et al Myra 1, owd, NWc NE 16-13-12e	*	2818
Harris & Hayes et al Bruner 1-A, SWc NW SE 26-14-13e	*	2675
Magnolia Pet. Co. M. Thompson 6, NWc SW NE 1-11-13e	*	2998
Nicholson Corp. B. Davis 3, NWc SE SE 13-11-13e	*	....
Osage County—		
Indian Terr. Ill. Oil Co. 5, NWc 14-29-10e	5	1098
15, NWc NE SE 15-29-10e	100	1022
Wiser Oil Co. 15, NEc SW NE NW 27-29-11e	10	994
Phillips Pet. Co. 15, NWc NE SE 2-27-5e	1517	2974
Carter Oil Co. 8, SEc NW SE NW 9-26-6e	45	3184
Mid Kansas Oil Co. 1, NEc NW 1-26-11e	¶1¼	1635
5, C SE NW NW 11-21-10e	100	2358
Prairie Oil & Gas Co. 2, C NW SW SE 21-25-6e	450	2732
3, C SE SW SE 21-25-6e	115	2714
Wrightsman et al 1, SEc SW SE NW 19-25-8e	380	2742
Devonian Oil Co. 13, NEc NW NE NW 34-25-11e	15	1754
Tidal Osage Oil Co. C SW SE SW 24-24-8e	100	2176
Tselos, Roxana Pet. Corp. 3, SWc SE SW SE 1-24-11e	15	1725
Clint Moore et al 1, NWc 14-21-9e..	10	2312
Kanupp & Bozo Oil Co. C S L NH SH NE 18-21-10e	15	1975
Commercial Drilling Co. 7, NE SE NE SE 16-21-12e	15	2000
Elliott & Smith 22, NEc NW 30-21-12e	80	2058
Sand Springs Home 1, SEc NE 30-20-11e	10	2328
L. C. Hivick 1, SWc NE 26-29-11e	*	1812
Rex Pyramid 1, SWc NE 23-22-11e.	*	1820
Devonian Oil Co. 1, NEc NW NE SW 30-2-10e	*	2688
Skelly Oil Co. 2, NWc SE 7-21-11e	*	....
Pawnee County—		
Magnolia Pet. Co. School 1, NEc 36-23-4e	12	2946
Elmer Oil Co. Rimmer 6, SEc NW SW 16-20-6e	30	3081
Magnolia Pet. Co. Baker 9, NEc SW NW 16-20-6e.	30	2845
School 2, SWc NE SW 16-20-6e ..	20	3063
Josey Oil Co. Scott 2, NWc 22-20-6e, owd	30	3112
Mid-Continent Pet. Corp. School 15, SWc SE SW 16-20-7e	35	2594
Tidal Oil Co. Sublet 9, NWc NE NW 21-20-7e	25	2613
Marland Oil Co. Miller 2, SEc NW 33-23-3e, owd	*	4050
Miller 4, SEc SW NW 33-23-3e ..	*	4084
Markham Oil Co. Clark 1, SWc 9-20-7e	*	3397
Payne County—		
Olean Pet. Corp. Erwin 1, SEc 14-19-4e	1570	3741
Magnolia Pet. Co. Chevelier 13, NWc SW SE 27-19-4e	¶¼	662
Amerada Pet. Corp. Haley 3, NEc SE SE 23-18-3e	48	3765
Mulberry Oil Co. Sharrum 1, C NW NW 5-17-4e, owd	¶11½	1944
Home Gas Co. Foster 1, NEc SE NW 6-17-4e	¶5½	3658
Seminole County—		
Gypsy Oil Co. N. Williams 2, C NE SW SW 28-11-8e	173	3451
Carter & Pulaski Oil Co. Baker, C NW NE NE 33-11-8e	40	3416
W. R. Ramsey Amos 4, C SE SE SE 31-8-8e, owd	1390	4163
Homaokla Oil Co. Carolina 2, C SE NE NE 6-7-8e	1608	4108
W. R. Ramsey Taylor 2, C SE NE SW 19-8-8e	*	3377
Stephens County—		
Gant et al School 2, NWc NE 36-1s-9w	¶22	2034
Empire Gas & Fuel Co. Storey 5, SWc SE SE NW 32-1s-8w	35	1986
Pace et al Nigh 1, SEc NE NE 11-2s-8w	¶2	1768
Homaokla Oil Co. Waters 1, C SW NE 10-2n-9w	*	3018
Shander Drilling Co. Castle 1, SEc NW 34-1n-9w	*	2503
Merchant Fain et al Harrison 1, NWc 26-1s-8w	*	2250
Winkler & McQueen Bristowe 1, NWc 18-2s-7w	*	2271
Tulsa County—		
Holmes et al Robinson 4, C S L SE SW 14-19-10e	¶12	2297
Crown Central Pet. Co. Beaver 1, NEc NW NE 15-19-10e	25	2025
Green et al Gaines 4, C WH NE 2-17-14e	¶¼	1409
W. O. Dickinson Cooper 1-A, C E L WH SW SW 12-16-13e	20	1538
Pelham Pet. Corp. Orcutt 7, SEc NW 33-19-13e	*	2104
Minshall et al Childers 2, NEc SE SW 2-17-14e	*	1475
Wagoner County—		
Iron Mountain Oil Co. Scales 1, SEc NW 29-18-16e	40	813
D. T. Marr Hawkins 1, NWc SE 29-18-16e	50	787
O. A. Sewell et al Tom Taylor 2, NEc SE NE 20-17-16e	*	1090
B. B. Wheeler Murrell 1, C SW SE SE 8-16-18e	*	....

Arkansas

Lisbon Field, Upton County—		
E. M. Jones Andres 1, 16-17-16....	150	2138
Olvey et al Slaughter 1, 9-17-16....	120	2106
Slaughter 4, 9-17-16	800	2099
Rovenger Oil Corp. Goodwin 2, 16-17-16	135	2104
Goodwin B-1, 16-17-16	20	2142
Harrell 1, 15-17-16	15	2157
Simms Oil Co.'s Dumas A-2, 9-17-16	60	2094
Wingfield et al Slaughter 2, 9-17-16..	800	2093
Smackover Field, Ouachita County—		
Amerada Pet. Corp. Calloway 5, 4-16-15	30	2381
Natural Gas & Fuel Corp.'s Hill A-5, 5-16-15	¶20	2552
Standard Oil Co. Umstead 7, 32-15-15	50	2012
Broderick & Calvert Murphy C-2, 8-16-15	115	2627
Sam Cook Tatum 7, 7-16-15.....	¶20	2637
Crawford & Sebastian James 10, 6-16-15	*	3233
Estes et al Murphy 1, 15-16-15....	100	2620
Federal Pet. Co. Lawton B-7, 10-16-15	100	2612
Gulf Ref. Co. McElroy 1, 4-16-16..	10	2694
McMullen 2, 1-16-16	165	2567
Humble O. & R. Co. Giller 5, 15-16-15	85	2576
Kinnebrew et al Williams 1, 3-16-15	15	2550
Laurel Oil & Gas Co. Tatum 5, 7-16-15	40	2561
Lion O. & R. Co. Murphy C-9, 8-16-15	30	2696
Wilson 3, 17-16-15	100	2676
Little Fay Oil Co. Burns 3, 17-16-15	40	2620
Magnolia Pet. Co. Hatfield 4, 7-16-15	105	2575
Murdock et al Vestal 8, 17-16-15....	50	2686
Thurman et al Houston 1, 12-16-16 ..	*	2694
Unity Pet. Co. Roper 7, 3-16-15....	35	1988

Mountain States

WYOMING

Warm Springs—		
British Associated Oil Co. 1, SW¼ 34-43-95	80	1011
Black Mountain—		
Utah Oil Ref. Co. No. 3, 31-43-91..	300	....

MONTANA

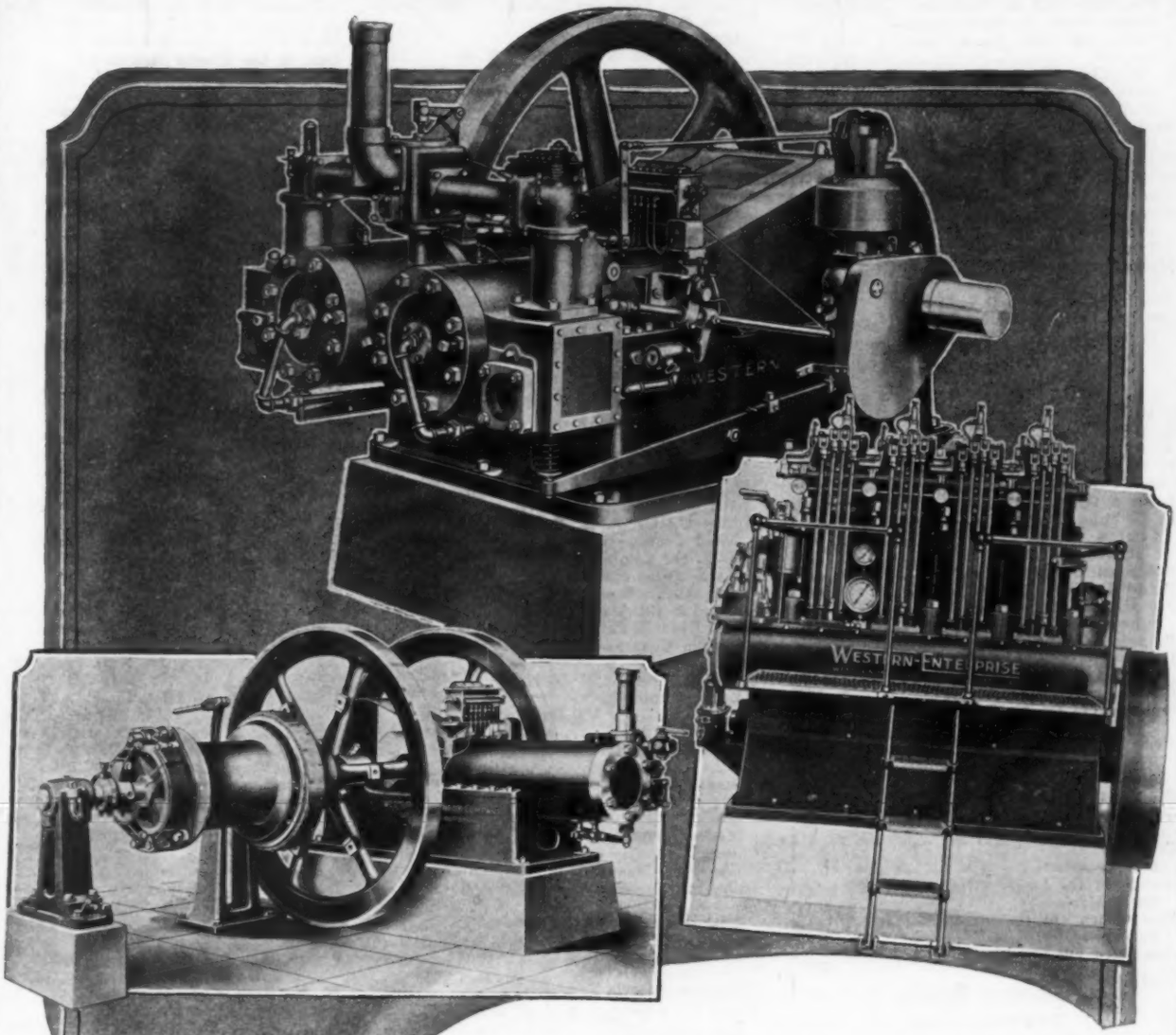
Kevin-Sunburst—		
Homestake Exploration Co. No. 6 NE¼ 36-35-2	1800	1450
Ferdig Oil Co. No. 4B NW¼ 25-35-2	140	1513
Lake Basin—		
Record Petroleum Co. No. 1 DL NW¼ 25-1-21	250	2863

NEW MEXICO

Eddy County—		
Flynn, Welch & Yates No. 2K SE¼ 21-18-28	75	2178
Snowden & McSweeney No. 1 4-21-30	*	4415

Louisiana

Bellevue Field—		
Autrey Oil Co.'s Connell 1, 15-19-11	20	429
Hanby Trust's Larkin 1, 14-19-11..	5	395
Louisiana Oil Ref. Corp.'s Bodcau Fee D-29, 15-19-11	75	353
Caddo Parish—		
H. J. Bussa's Allen 7, 23-22-15....	10	1055
Dixie Oil Co.'s Donovan 4, 21-22-15	10	1048
Shawmut Pet. Co.'s Jolley 3, 22-22-15	2	1006
Jolley 4, 22-22-15	3	1014
Monroe Gas Field—		
Palmer Corp.'s Fee 1, 24-19-4e.....	¶5	2168
United Carbon Co.'s Archie 1, 24-20-4e	¶10	2190



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Company, Well and Location	Initial Production Bbls.	Depth
Urania Field, La Salle Parish—		
Atlantic Oil Prod. Co.'s Tullos 4, 26-10-1e	10	1513
O. W. Clark Trust's Russell 1, 26-10-1e	25	1561
Smith 1, 26-10-1e	30	1572
Explorer Oil Corp.'s Tullos 1, 23-10-1e	10	1502
Galloway et al's Pendarvis 2, 23-10-1e	10	1530
Greenwall et al's Sayers 1, 26-10-1e	30	1552
Youngblood et al's Price 1, 25-10-1e	125	1543
Louisiana Oil Ref. Corp.'s Tremont Lumber B-11, 25-10-1e	80	1563
Tremont Lumber B-28, 25-10-1e	250	1514
Standard Drilling Co.'s Bass 1, 26-10-1e	20	1534
Roberts et al's Russell 1, 25-10-1e	20	1517
Standard Oil Co.'s Urania Lumber 4, 19-10-2e	*	1566

California

Long Beach—		
J. M. Cooper 2	180	4460
K. S. Deed	75	2990
A. J. Delaney Cerritos 10	350	4455
F. M. & S. Synd. Los Cerritos	200	4450
Geo. F. Getty Cerritos 12	200	4424
Lewis & Glass Cerritos 1	200	4435
E. J. Miley Cerritos 2	150	4445
Cerritos 1	125	4445
W. H. Playter 2	150	4445
Robertson Company Cerritos 4	400	4485
Retsof Drilling Co. Cerritos 79	50	4435
San Martinez Oil Co. Frye 3	250	4920
Athens-Rosecrans—		
Barnsdall Oil Co. O'Dea 9	800	4155
Union Oil Co. Zins 1	*	6600
Baldwin Hills-Inglewood—		
Golden Flood Oil Co. Santous	*	3620
Standard Oil Co. L. A. Investment	*	5700
Torrance-Redondo—		
Shell Co. Redondo 12	73	3610
Redondo 13	48	3610
Santa Fe Springs—		
General Pet. Co. 18-A	400	3850
California Pet. Corp. Mutual 1	109	4500
Kern Front—		
George F. Getty Tegeler 16	75	2544
Midway—		
Associated Oil Co. 3	300	2905
Santa Maria—		
Rice Ranch Oil Co. Brookshire 10	*	4524
Ventura—		
Associated Oil Co. Lloyd 20	1440	5749

Eastern States

PENNSYLVANIA

Bradford Field—		
South Penn Oil Co. Fee 39	4	....
Fee 1	4	....
Hodge 2	3	....
Whipple 2	2	....
Petroleum Reclamation Co. Pratt 11	3	....
Pratt 12	3	....
Mott 2	3	....
R. C. Lloyd Ekas 16	3	....
Ekas 17	3	....
Roy E. Diament Diament 12	7	....
Hazlewood Oil Co. Bingham 117	7	....
J. A. Walters Estate Walters Estate 37	8	....
P. L. Golden & Co. Quintruple 57	4	....
G. L. Rhodes & Co. Emerson 1	*	....
Forest Oil Co. Franks 1	3	....
Gridiron Oil Co. Duke 3	4	....
L. G. Dana Dana 1	3	....
Healey & Daly Bingham 500, tract 25	3	....
M. W. & Ida Slike Slike 7	2	....
Linnwood Oil Co. Chapin 30	3	....
Clarion County—		
Haslerman & Roggenkamp Hoover 2	2	....
Alum Rock Gas Co. Beichner 8	3	....
McCauley 1	*	....
Hugus, Fry & Carroll Rowe 3	3	....
Collner, Freeman & Co. Master 1	¶1¼	....
Heeter, Potts & Co. Neeley 4	2	....
Butler County—		
Harry King Daubenspick 1	3	....
Robinson & Meek Bovard 1	2	....
Haverstraw, Elliott & Co. Myers 13	2	....
Parker & Black Corso 1	2	....
Charles Neigh & Co. Neigh 3	2	....
Center-Middle Field—		
D. Wade Irvine 1	2	....
Citizens Gas Co. Lot 104, tract 2	*	....
Cooper & Co. Groat 2	3	....
Greene County—		
T. J. Hamilton & Co. Elizabeth B. Rice 1	¶½	....
Sutton & Mong C. S. Day 1	*	....

NEW YORK

Allegany County—		
Citizens Natl. Bank Co. Reid 5	3	....
W. O. & C. O. Taylor Taylor 1	3	....
J. M. Hughes & Co. Hughes 1	2	....
C. C. Brennan & Co. Brennan 1	2	....

WEST VIRGINIA

Ritchie County—		
Smith & Watterson Herman Stersberg 1	2	....
South Penn Oil Co. Patton-Conaway 5	20	....
Big Four Drilling Co. D. C. Newbrough 1	40	....
Hays & Roberts Wilson Bros. 1	5	....
Arnold Adams & Co. James Ingram 1	*	....
Doddridge County—		
Hope Construction & Ref. Co. Henry Yeater 1	¶1½	....
Manufacturers Light & Heat Co. U. G. Hammond 2	10	....
Murlhy Oil Co. A. K. Rollins 4	5	....
Wood County—		
Four S. Oil Co. John Lenhart 1	10	....
Jonas & Parks Ewing heirs 2	2	....
Marshall County—		
Kellman & Co. Mary E. Rose 1	2	....
W. A. Evans & Co. W. E. Parriott 1	*	....
Lincoln County—		
Laurel Dev. Co. B. B. Jaynes 3	¶1	....
Cambridge Gas Co. J. D. Miller 2	¶1	....
Lewis County—		
Pittsburgh & West Va. Gas Co. L. M. Waugh 1	¶2	....
Cobinn Oil & Gas Co. H. C. Ramsey 1	*	....
Putnam County—		
Teays Production Co. A. B. & E. Griffith 2	12	....
Marion County—		
Clifton Oil & Gas Co. O. N. Koen 4	5	....
Pleasants County—		
Bailey Gas Co. H. S. & J. E. Ambler 5	2	....
Upshur County—		
Jane Lew Gas Co. A. W. Lewis 1	2	....
Kanawha County—		
South Penn Oil Co. Lincoln Dodd 1	¶½	....
Calhoun County—		
Euclid Oil & Gas Co. M. A. C. Board 2	¶2	....
Monongalia County—		
Cleveland-Cameron Gas Co. S. W. Gilmore 1	¶2½	....
Roane County—		
Green Creek Oil & Gas Co. William Fields 1	*	....

KENTUCKY

Owensboro District—		
Penn-Indiana Oil Synd. Laura Mercer 1	8	....
Greasy Creek Oil Co. David King 6	2	....
White Plains Oil & Gas Co. Orella Ralph 1	10	....
Wah-Shah-She Oil Co. R. R. Kelley 1	*	700
Ohio Oil Co. Mason 1	*	1300
Kentucky Oil Co. E. Morrison 1	*	....
Barren County—		
Consolidated Gas Co. H. W. Duff 14	*	....
Houchins Leasehold Co. Lovelady 1	*	....
Russell Oil Co. P. Page 1	2	....
Esslinger Oil Co. Jones 1	10	....
Estill County—		
Reno Oil Co. S. M. Maple 3	10	....
Lee-Owsley Counties—		
Lincoln & Perdue McGuire Heirs 1	10	....
Lawrence-Johnson Counties—		
Swiss Oil Corp. G. Evans 14	7	....
Johnson-Magoffin Counties—		
Patrick & Co. W. L. May 1	10	....
Warren County—		
Wilson & Co. Herb Jenkins 3	*	1250
Allen County—		
Cyphus & Harley Lon Oliver 4	*	300

SOUTHEASTERN OHIO

Washington County—		
Todd & Riggs H. R. Green 5	30	....
O. S. Reckard & Co. F. F. Dana 12	3	....
Dash & Co. James Watterson 3	*	....
Dent & Co. Charlie Robinson 2	¶1	....
Pollard & Shultz E. & D. M. Shaw 2	*	....
J. C. Dinsmore Estate Titus Medley 4	*	....
Joe Kiggins A. P. Beach 1	¶½	....
Muskingum Gas Co. John Scott 2	¶1	....
Morgan County—		
Arkansas Oil & Gas Co. B. L. Stoneburner 3	¶1	....
The Sun Co. Amos Souders 10	10	....
Jospeh Longstreth 4	10	....
The Pure Oil Co. William Epply 9	30	....
Noble County—		
C. D. Harper & Co. Forest Moore 2	*	....

CENTRAL OHIO

Athens County—		
Jay Oil & Gas Co. J. E. Bailey 8	¶¼	....
Ohio Oil Co. Ohio Oil 1	*	....
Ohio Oil & Gas Co. Ellsworth McKnight 3	5	....
Julian Giff 1	*	....
R. W. Jones 2	10	....
C. H. Beasley & Co. W. D. Whaley 9	*	....
Harmond & Co. H. Riley 1	*	....
Townsend Oil & Gas Co. Elizabeth Smoot 8	5	....
Gross & Co. George C. Kerns 1	*	....
R. E. Hemrick & Co. C. D. Swartz 1	¶½	....
Holmes County—		
East Ohio Gas Co. J. E. & M. Miller 1	185	....
J. R. Forgy 6	70	....
G. & M. Galley 3	70	....
The Pure Oil Co. W. H. Miller 4	4	....
Empire Gas & Fuel Co. U. S. Davenport 5	¶1	....
J. R. Reese 1	*	....
Coshocton County—		
Murphy & Co. Wheeler Householder 1	165	....
Empire Gas & Fuel Co. E. Henderson 1	*	....
Knox County—		
I. E. O'Hail Hillery Pyers 1	¶¼	....
Ohio Fuel Supply Co. Robt. Neiderhouser 1	15	....
Meigs County—		
P. S. Clifton & Co. Earnest McBride 1	¶1¼	....
W. N. Hivis J. T. Hartley 1	¶1	....
Muskingum County—		
M. F. Whitehill J. Boyer 1	225	....
Licking County—		
M. F. Whitehill & Co. Florence H. Stitt 6	60	....
Ashland County—		
Hulse & Kundtz Daniel Markel 1	¶1½	....
Wayne County—		
W. E. Hawk & Co. William Funk 1	¶2	....
Jackson County—		
Ohio Fuel Supply Co. George W. Westlake 1	*	....
Fairfield County—		
Ohio Fuel Gas Co. B. S. Turner 1	*	....
Medina County—		
East Ohio Gas Co. Phoebe Stroskopf 2	*	....
Hocking County—		
Cottrill Oil & Gas Co. J. C. Cottrill 1	*	2845

NORTHWESTERN OHIO

Hancock County—		
Ohio Oil Co. C. L. Turley 7	12	1710
Clark & Starr Jane Wheeler 5	20	1385
Hardin County—		
Ulrich, Sanford & Co. A. R. Zimmerman 5	55	1495
Wood County—		
Haman, Schiedt & Co. H. Avery 4	30	1475
Auglazie County—		
Ohio Oil Co. J. H. Gochenour 16	10	1259
Ottawa County—		
Herman & Gladieux William Nissen 1	5	1384

Kansas

Butler County—		
Empire Gas & Fuel Co. Wilson 162, C EH WH NW 8-25-5e	25	581

Introducing— Lew D. Hilton

A PRACTICAL OIL MAN who, while he doesn't claim to know it all, has had a wealth of actual experience in directing oil drilling and production, with special training in control work, in which he is particularly proficient and for which he is specifically prepared by the facilities at his command.

Lew is direct from the fields, where he has rubbed elbows with the oil man's problems as they ARE and not as theorists might have them, and has learned from actual experience many of the methods of solving these problems. He is a happy combination of both the highly technical and the thoroughly practical field man. A great many of you oil men know Lew personally, and to you no introduction is needed.

Call on Lew for information or service. His Houston office has been opened for the sole purpose of assisting the operators of the Mid-Continent field, wherever his services are needed. His counsel costs you nothing.

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1521 Post-Dispatch Bldg.
Preston 10093 Houston, Texas

TULSA OFFICE
406 West First St. Phone 22798

Regan Pipe Suspension and Control Heads and Regan Traveling Blocks

Company, Well and Location	Initial Production Bbls.	Depth
Cowpunchers Oil Co. Bitler 2, NEc NW NE SE 30-26-8e	35	2716
Flack Davidson et al Tobler 2, SWc SE 22-27-7e	365	2717
Sinclair Oil & Gas Co. Barnhill 1, NWc SE SE 22-27-7e	25	2735
3, NWc NE SE 22-27-7e	150	2706
Texas Oil Co. Truesdale 1, SEc SW 22-27-7e	180	2740
Manhattan Oil Corp. Iobe 2, SWc SE SE 28-27-7e	150	2740
3, NEc SE 28-27-7e	50	2755
Federal Oil Co. Laughlin 2, NEc SE NE NE 33-27-7e	200	2746
Mid Kansas Oil & Gas Co. Nelson 1, NEc NW 22-28-7e	40	3094
Donnelly et al Flint 1, SEc NE 7-23-8e	*	2740
Cassoday Oil Co. Doornbos, SWc SE SE 28-25-6e	*	2802
Empire Gas & Oil Co. Finney 19, NEc SW SW 4-26-5e	*	2494
Chautauqua County—		
Watchorn Oil & Gas Co. Walker 2, SWc NE NE 28-32-10e	30	2264
Maddex et al Musser 1, SWc NW SE 5-32-13e, lcn	*	....
Dunn et al Humphreys 1, SWc 5-33-10e, rig	*	....
Garner et al Fish 1, SEc NE 5-33-12e	*	400

Company, Well and Location	Initial Production Bbls.	Depth
Cowley County—		
T. B. Slick Carson 6, NEc SE NE 19-32-3e	20	2618
Arkansas Fuel Oil & Gas Co. Dudgeon 2, NEc SW NE 6-32-5e	*	3507
Elk County—		
Southwestern Gas Co. Ames 1, SEc 15-31-10e	¶¼	1170
Tidal Osage Oil Co. Snodgrass 2, SEc SW SW 30-30-10e	*	....
Greenwood County—		
Empire Gas & Oil Co. Atyeo 3, SEc NE NW 6-22-10e	500	2248
Kansom Oil Co. Atyeo 3, NWc NE 6-22-10e	150	2304
Theta Oil Co. Pixlee 8, NEc SW SE 8-22-10e	50	2350
Davis Hazlett et al DeMalorie 1, SWc NE 12-22-10e	450	2129
Texas Oil Co. Prather 4, C N L NH SW 29-22-10e	150	2392
York State Oil Co. DeMalorie 5, NWc NE NE 32-22-11e	200	1981
O'Neil 1, SEc NW SE 32-22-11e	100	1979
Mission Oil Co. Dales 8, SWc NW 25-23-8e	40	2499
Mid-Continent Pet. Corp. Shadel 7, C SW 15-23-13e	25	1620
Derlinger 3, SEc NE NE 8-23-13e	50	1736
Leeward Pet. Corp. Hill 3, SEc NE	*	

Company, Well and Location	Initial Production Bbls.	Depth
27-24-9e	30	2206
Beacon Oil Co. Weirshing, NWc SW NW 24-26-9e	75	2175
Theta Oil Co. Browning 16, NEc SW NE 17-22-10e	*	2400
Empire Gas & Oil Co. Morris 3, SWc SE NW 19-23-9e	*	2760
White Eagle Oil & Ref. Co. Morris 7	*	....
Murphy et al Linderman 1, NWc SW NW 29-24-11, owd	*	1685
Roth & Faurot, Birkett 8, C N L SH SW 12-25-8	*	2279
Flintridge Pet. Co. Miles 2, SEc NE 23-26-9	*	2279
Lyon County—		
Sheedy et al Atyeo 1, SEc SW 31-21-10	200	2300
J. V. McMahon Reese 1, SWc 16-20-10	*	2527
White Eagle O. & R. Co. Pixlee 1, SWc SE 34-21-10	*	2300
Balliere et al Carson 1, SWc NE 18-21-13	*	1937
Russell County—		
Valerius O. & G. Co. Oxwald 14, SEc NW NW 17-12-15	225	2978
Woodson County—		
Equity Oil Co. Clark 1, SWc NE NW 29-26-17	*	3340

WILDCATS FROM ALL SECTIONS

Texas Panhandle District

COMPLETIONS

Company, Well and Location	Initial Production Bbls.	Depth
Carson County—		
J. S. Cosden et al Burnett 1	¶28	2819
Moore County—		
Amarillo Oil Co. R. B. Masterson 2-A	¶56	2545

DRILLING REPORT

CARSON COUNTY — Amarillo Oil Co.'s Bivins 3-B, making 60 million ft gas, tools stuck, td 3000 ft. Amatex Dev. Co.'s Polling 1, rotary rig. American Ref. Co.'s Burnett 6, sd 2092 ft. B. S. Barnes et al's Burnett 1, sd 1150 ft. Culberson Bros.' Burnett 1, sd making 75 million ft gas 2425-2680 ft, td 2790 ft. Gates Oil Co.'s Burnett 2, co 2957 ft. Gulf Prod. Co.'s Burnett 10, dr 2475 ft; Burnett 11, dr 210 ft. Magnolia Pet. Co.'s Burnett 1-A, dr 1980 ft. Marland Oil Co.'s Burnett 5, rig; Burnett 1-A, dr 2890 ft; Burnett 1-B, dr 2275 ft. McFarland & Thomas' G. W. Witter 1, rig. The Texas Co.'s M. C. Burnett 4, sd for storage, td 2867 ft; Burnett 8, lcn. Young & Patrick's McConnell 1, dr 350 ft.

COLLINGSWORTH COUNTY—Continental Oil Co.'s Hughes 1, sd for 5 3/16-inch cas, 3350 ft.

COTTLE COUNTY—National Potash Co.'s A. C. Dulaney 2, (core test) sd 1600 ft.

GRAY COUNTY — Anderson-Brock et al's Beavers 1, sd 3800 ft. C. H. Clark et al's Merton Bros. 1, spudding. Empire Gas & Fuel Co.'s H. Heithott 1, co with oih after shot 3248-58 ft. The Texas Co.'s G. H. Saunders 2, set 10-inch cas 1665 ft; W. J. Brown 1, dr 1555 ft. H. F. Wilcox-Pampa Oil Co.'s Coombs-Worley 2, stdz 2140 ft; Worley-Reynolds 3, rotary rig.

HUTCHINSON COUNTY—Apex Oil Co.'s Smith 1, lcn. American Ref. Co.'s G. A. Whittenburg 1, dr 2685 ft. Badger Oil Co.'s Tom Lewis 1, cavey hole 2085 ft. Big Creek Oil Co.'s Merchant 1, lcn. Bear Creek Oil Co.'s E. E. Watkins 1, rig. Canadian River Oil Co.'s (was Jim Whittington) Kingsland 2, 3 and 4, rigs. Canyon Oil Co.'s J. A. Whittenburg 1, fsh 2330 ft; Whittenburg 2, dr 560 ft. Walter Cline & Douglas Oil Co.'s J. A. Whittenburg 1, rig. Cockrell-McIlroy Oil Co.'s Smith 1, dr 545 ft; Smith 2, rig. Jack Crosbie et al's J. A. Whittenburg 1, dr in oil pay 2900 ft. Currie Bros. & J. R. Phillips' Smith 1, cavey hole, 2880 ft. Dixon Creek Oil Co.'s Smith 3, cavey hole, 1950 ft; Smith 4, dr 1460 ft; Smith 5, rig. Double Five Oil Co.'s E. Cockrell 1, rig. Dunnigan et al's Whittenburg 1, dr 2910 ft. Fly-Blackburn Oil Co.'s Weatherly 1, dr 210 ft. Gates Oil Co.'s Kingsland 1-A, dr 1535 ft; Kingsland 2, dr 1490 ft; Kingsland 3 and 4, rigs. Gibson Oil Corp.'s Johnson 1, dr 250 ft; Kingsland 1, sd 1500 ft. Japhet et al's Smith 1, dk. Golding & J. R. Phillips' J. T. Hodges 1, dr 1990 ft. Gulf Prod. Co.'s E. Cockrell 1, swabbing 30 bbls 3007-32 ft; J. A. Whittenburg 2, dr 590 ft. Gulf-Cline & Panhandle Ref. Co.'s Dial et al 5, dr 230 ft; Dial et al 8, spudding; Dial et al 7 and 9, steel dks; J. A. Whittenburg 1-B, rig. W. S. Heywood et al's E. Cockrell 1, dr 1735 ft. W. H. Holmes et al's Smith 1, set 6⅝-inch cas 2580 ft. Inspiration Oil Co.'s E. Thompson 1, lcn. W. L. Kingsland's Fee 1, rig. J. H. Lenix et al's Johnson 1, rig. Lucky Ten Oil Co.'s Smith 1, dr 460 ft. McIlroy & Herring's Smith 2, spudding. McIlroy Oil Co.'s Smith 3, dr 570 ft. McMan O. & G. Co.'s Johnson 1, dr 490 ft; Smith 1, rig; Smith 2 and 3, lcns. J. H. Middleton et al's Weatherly 1, pulling cas to complete as gasser, td 3248 ft; Smith 1 and 2, rigs. Mid-West Exploration Co. & W. H. Holmes' Smith 1, rig; Smith 2, rig. A. D. Morton et al's Johnson 1, dr 200 ft. Native Oil Co.'s Johnson 2 and 3, lcns. Newby Oil Co.'s E. Cockrell 1, dr lime 2840 ft. New Domain Oil & Gas Co.'s Kingsland 1, rig. Pattison Oil Co.'s (was Lenix & Stover) Smith 1, sd 2857 ft. J. R. Phillips et al's Weatherly 1, cavey hole 3096 ft; Kingsland 3 and 4, rigs; Kingsland 5, lcn. J. R. Phillips & Heywood's Smith 1, ur cas 365 ft. Phillips Pet. Co. and Canyon Oil Co.'s Whittenburg 1, sd 2748 ft. Phillips Pet. & Drysdale Oil Co.'s Weatherly 1, dr 3175 ft, with 650 ft oih at 3112-25 and 3146-56 ft. Phillips Pet. & Gibson Oil Corp.'s G. A. Whittenburg 2, dr in oil pay 2705 ft; J. A. Whittenburg 1, swabbing 100 bbls after shot 2895-2941 ft; J. A. Whittenburg-Whitley 1, rig. Phillips Pet. & McMillen et al's J. A. Whittenburg 1, cem 8¼-inch cas 2806 ft. Phillips Pet. & Pulaski Oil Co.'s J. A. Whittenburg 1, dr 2830 ft; Whittenburg 2, sd repairs 2240 ft; J. A. Whittenburg (Sec. 12) 1, spudding; Smith 1-A, sd 1890 ft; Smith 3, cem 8¼-inch cas 2015 ft; Smith 4, cavey hole, 1750 ft; Johnson 1, cavey hole 2020 ft; E. Cockrell 1, cavey hole 2330 ft. Phillips Pet. Co. et al's Johnson 1, dr 2917 ft. L. M. Parnum 1, lcn. Phillips Pet. Co. & So. Hutchinson Oil Co.'s Whittenburg 2, dr with 1100 ft oih 2900 ft; Whittenburg 3, sd 2285 ft; Whittenburg 4, 5 and 6, rigs. Prairie Oil & Gas Co.'s Weatherly 2, pulling big pipe 2188 ft. Prairie & T. P. Coal & Oil Co.'s Johnson 1, co and making 60 bbls oil 2969-3017 ft. W. R. Ramsey et al's Johnson 1, dr 2265 ft. Relief Oil Co.'s Smith 1, set 15½-inch cas 410 ft. Henry Riley & W. H. Holmes' Smith 1, lcn. Roxana Pet. Corp.'s Smith 2, dr 715 ft; Smith 3, dr 310 ft; Smith 1-B, dr 457 ft; Smith 2-B, rig; Lee Bivins 1, lcn. Skelly Oil Co.'s Johnson 1, rig; Johnson 1-A, spudding; J. A. Whittenburg 1, dr 2890 ft; Whittenburg 2, cavey hole 2020 ft; Whittenburg 3, sd 880 ft; Whittenburg 4, cavey hole 2000 ft; Whittenburg 5, dk. J. L. Smith's Smith 1 and 2, dks; Smith 3 and 4, lcns. J. L. Smith & Bynum's J. A. Whittenburg 1, ur 8¼-inch cas 2155 ft. Smith & Wilbanks' Wm. Lyal 1, rig. Spring Creek Oil Co.'s Smith 1, dr 490 ft; Summit Oil Co.'s J. A. Whittenburg 1, sd for shot flowing 400 bbls oil 2932-89 ft; Whittenburg 2, dk. The Texas Co.'s Burnett 7, ur 12½-inch cas 670 ft; E. Cooper 1, dr 2235 ft. Travelers Oil Co.'s Kingsland 2, rig. Triangle Oil Co.'s Smith 1, sd 465 ft. Tex-O-Oil Co.'s Johnson 1, sd 2740 ft. Twinsix Oil Co.'s Kingsland 2-A, dk; Kingsland 1 and 3, fsh 385 ft; Kingsland 4, fsh 2760 ft; Kingsland 5, rig. J. D. Ward et al's E. Cockrell 1, set 8¼-inch cas 2175 ft. Westex Oil Co.'s Whittenburg 1, flowing 160 bbls oil 2873-2935 ft; Whittenburg 2, spraying 25 bbls oil, fighting cavings 2884 ft. Western Oil Dev. Co.'s O. W. Jarvis 1, lcn. White Eagle O. & R. Co.'s Smith 1, dr gas 2645 ft; Smith 2, rig; Smith 3, spudding; Smith 4, lcn; J. A. Whittenburg 1, rig; Johnson 1, dr 1680 ft. Winner Oil Co.'s J. E. Pritchard 1, rig. Whittenburg-Coble Oil Co.'s J. A. Whittenburg 1, 2, 3 and 4, rigs.

MOORE COUNTY—M. Cadman-Martin et al's Sneed 1, rig; C. H. Clark et al's Sneed 1, dr 210 ft. Lee Flowers & Marland Oil Co.'s Sneed 1, rig. Landreth Prod. Corp.'s Sneed 1, rig.

POTTER COUNTY — Amarillo Oil Co.'s Bivins 4-A, fsh bit 3005 ft. Prairie O. & G. Co.'s Bivins 1, dr granite 3120 ft.

ROBERTS COUNTY—Phil Engle et al's Lederick 1, sd 4020 ft. W. M. Shriner et al's T. S. Jones 1, lcn.

SHERMAN COUNTY—Get Oil Co.'s (Louis Freidman) Lee Bivins 1, lcn.

WHEELER COUNTY—Gibson Oil Corp.'s (was Canadian River Oil Co.) H. C. Phillips 2, rig. Mid-West Exploration Co.'s G. W. Porter 1, dr 215 ft. McFarland & Thomas' Kachelhoffer 1, sd 2365 ft. Hal Vaughan et al's O'Gorman 1, dr 165 ft.

FRICK-REID SUPPLY COMPANY

WAITLOCK GUARANTEED CORDAGE

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STANDARD SEAMLESS CASING-DRILL PIPE-TUBING

WARREN STEAM ENGINES

Axelson Sucker Rods —why they don't break

LISTEN to the comments of a bunch of men at an athletic event when a fine specimen of manhood walks out. "Look at the arms on 'im!" they exclaim. "Look at that rascal's neck!" they implore.

Have you noticed recent advertising in the trade papers on Axelson Sucker Rods? Ever stop to figure out the psychology of such an advertising campaign?

It's a very fine Sucker Rod, as you well know—the finest in the industry. And Axelson wants you to "Look at the neck on 'im!"

Axelson Rods are for sale at all Frick-Reid Stores, and you may have literature on request.

West of the Mississippi—
Stores Everywhere

East of the Mississippi—
The Frick & Lindsay Co.

In oil field equipment the most human organization in America

FR

TULSA, OKLA.
PITTSBURGH, PA.

Coastal Wildcats

COMPLETIONS

Company, Well and Location	Initial Production Bbls.	Depth
Calcasieu Parish—		
Vacuum Oil Co.'s Miller 6	3300	4457
Jefferson County—		
Houston Oil Co.'s Sun Davis 4	*	3631
Wharton County—		
Atlantic Oil Producing Co.'s Taylor 5	*	....

DRILLING REPORT

BRAZORIA COUNTY—Roxana Pet. Corp.'s R. R. Kropp 1, 150 ft to N and 1150 ft to E line of R. R. Kropp 100 acres in J. M. C. Neel sur, bailing, 578 ft; Clemens 1, S 78 deg E and 12,903 ft from NW cor of John McNeel League, dr 4296 ft, gumbo and lime; Allen 2, 1741 ft E of No. 1, Sterling McNeel tract, dr 2884 ft, gumbo. Rycade Oil Corp.'s Nash 6, 500 ft and 45 deg SW of No. 5, Lot 2 of W. R. Nash 200 acre tract, 500 ft to N line, dr 2254 ft hard sand; Nash 7, 1600 ft E of W line and 200 ft S of N line of W. R. Nash 200 acres, dr 1620 ft gumbo.

CHAMBERS COUNTY—W. C. Moore's Drought 1, 1 mi NE Blanke 2, in center of T&NO sec 28, dr 1050 ft.

FORT BEND COUNTY—Rycade Oil Corp.'s Flessner 3, 300 ft E of No. 2 lcn; Flessner 2, 325 ft N of Nash 5 and 150 ft N and 1300 ft E of SW cor of D Flessner 200 acres, dr 2977 ft, lime rock. Gulf Prod. Co.'s Moore 6, 84 vrs to S and 2598 vrs to E line, German Emig No. 80, dr 1400 ft gumbo and bldrs; Davis 8, 100 ft to N and W lines on G. Watson tract, dr 3540 ft; Davis 10, 200 ft N No. 9, dr 100 ft.

GALVESTON COUNTY—Gulf Prod. Co.'s Smith 5, 300 ft S No. 2 at High Island, rig.

GOLIAD COUNTY—Houston Oil Co.'s Pettus 1, 10 miles W of Goliad, dr 2896 ft, sandy shale; Parks 1, 8 miles E of Goliad, dr 2354 ft gumbo.

HARDIN COUNTY—Vacuum Oil Co.'s Teel 3, off Saratoga dome on R. Teel tract, dr 2205 ft, gumbo. Rio Bravo Oil Co.'s Fountain 5, 850 ft N and 900 ft E of SW cor of J. O. Fountain 100 acres off Saratoga dome, dr 3450 ft, gumbo. Texas Little Farms Co.'s Hawley 1, Joel E. Hawley League, no report.

HARRIS COUNTY—The Texas Co.'s Warren 6, 1300 ft W and 800 ft S of E line, E. Ehrenberg Sur, near Hockley, dr 3200 ft, gumbo; Warren 7, 700 ft NW of No. 3, dr 1450 ft, gumbo. Rio Bravo Oil Co.'s Settegast 2, 650 ft W and 500 ft S of NE cor Settegast 100 acres, setting screen on sand 4676 ft. Pierce Fee 2, 300 ft N and 75 ft E of No. 1, dk.

HUNT COUNTY—Rycade Oil Corp.'s Robinson 1, 500 ft S and 300 ft E of NW cor W. S. Robinson 25 acres, spudded.

JEFFERSON COUNTY—Houston Oil Co.'s Sun Davis 4, 400 ft N of No. 3 at Big Hill, abn 3631 ft; Sun Dyson 1, near Big Hill, dr 3052 ft. Gulf Prod. Co.'s Bordages 2, Fannette, rigging; Burrell 1, 1000 ft E of Thomas 5, near Fannette, dr 3310 ft. Yount-Lee Oil Co.'s McFaddin 4, 300 ft S No. 3 and 1500 ft S of Spindletop field, no report.

MATAGORDA COUNTY—Sheppard Mound Oil Co.'s Hawkins 2, on Hawkins Ranch, Sheppard Mound, sd 2980 ft; dr water well. Rycade Oil Corp.'s Kountz 1, 1000 ft W and 800 ft N of SE cor Blk 23, Henry Parker League, set 12½-inch cas 871 ft. Gulf Prod. Co.'s Craig 4, NE cor of T. Williams sur on J. H. Craig 840 acres, rigging; Sanborn 1, NE cor of T Williams sur, dk.

REFUGIO COUNTY—Houston Oil Co.'s O'Connor 1, Tom O'Connor Ranch, Hearn sur, near Mission Bay, testing gas sand 3490 ft.

VICTORIA COUNTY—Houston Oil Co.'s O'Connor 1, Mrs. M. V. O'Connor Ranch, near Mariana, 3128 ft showing gas.

WASHINGTON COUNTY—S. H. Spangler et al's Regeine 1, 6 mi NW of Burton on Regeine farm, sd 1200 ft waiting on drill stem.

WALLER COUNTY—A. L. Maxwell's 1, 7 miles N of Waller, no report.

WHARTON COUNTY—The Texas Co.'s Taylor 5, Boling, 200 ft SW of No. 4 and offset to Sinclair's No. 1, dr 3351, blue shale; No. 3, will put on air pressure; Taylor 7, 200 ft SW No. 5, dr 3378, sandy shale; Taylor 8, dr 746 ft, gumbo. Floyd 1, M. S. Floyd 56-acre lease, NW of Taylor No. 3, repairing rig. Atlantic O. P. Co.'s Taylor 3, 50 ft from both lines of SW corner of Atlantic 20-acre lease, set 6-inch liner 2893 ft; No. 2, set 6-inch liner 2910 ft; Taylor 4, 200 ft W of No. 2, standing 1750 ft; Taylor 5, 200 ft N No. 3, lcn abn. Humble O. & R. Co.'s Hawes 1, 50 ft from both lines of NE cor of E Hawes lease, killed gas; pulling and resetting 4½-inch screen 2850 ft; Hawes No. 2, 200 ft SW of No. 1, set 10-inch cas 1776 ft, td 1789 ft; Hawes 3, 200 ft SW of No. 2, rigging; Hawes 4, offset to Oxford's No. 1 Floyd, standing; Hawes 5, offset to Oxford's No. 2 Floyd, dr 1084 ft, gumbo; Hawes 6, offset to Vacuum's Hooper 2, and Oxford's 3, dr 1288 ft, gumbo. Sinclair O. & G. Co.'s Taylor 2, 200 ft S of No. 1, and offset to Texas Co.'s No. 5, showing gas 3273 ft; Taylor 3, 200 ft S of Sun's No. 1, dr 2580 ft, gumbo and lime; Taylor 4, 200 ft S of No. 2, and offset to Texas Co.'s No. 7, dr 2820 ft, gumbo and lime; Taylor 5, 200 ft S of No. 4, dr 1473 ft, gumbo; Taylor 6, 200 ft S of No. 3, dk; No. 1, washing out sand. Sun Co.'s Taylor 3, 50 ft from each line out of NE corner of NW 5 acres and offset to Atlantic's No. 3, repairing rig to sdtr; Taylor 3, offset to Humble's No. 3, dr 2818 ft in gumbo; Taylor 4, 200 ft S No. 1, dr 2507 ft in gumbo and lime; Taylor 5, offset to Humble's No. 6, dr 2078 ft in sand and lime; No. 7, 225 ft W No. 6, lcn; No. 6, 225 ft W No. 2, dk; No. 8, 225 ft W No. 7, lcn; No. 9, 225 ft W No. 8, lcn; No. 10, 200 ft S No. 2, lcn; No. 11, 200 ft W No. 4, sd. Gulf Prod. Co.'s Borden 1, on A. P. Borden 600-acre tract in SE corner, near Mackey, dr 3700 ft. Vacuum Oil Co.'s Hooper 1, 50 ft from each line of NE corner of L. M. Hooper 100-acre tract, dr 3214 ft in gumbo; No. 2, offset to Humble's Hawes 6, rigging. Oxford Oil Co.'s Floyd 2, 250 ft S of No. 1, dr 1314 ft in gumbo; Floyd 3, 230 ft S of No. 2, rigging. J. K. Hughes Dev. Co.'s Mullins 1, 350 ft W of E line of J. K. Hughes 60 acres, ready to spd. Murchison & Fain's Mullnis 1, moving in rig. Humphrey Oil Corp.'s Dennison 1, lcn. Houston Gulf Gas Co.'s Woodbine 1, 5400 varas NE along NW line and 500 varas S at right angles with line in John Huff sur, mudding 478 ft; Nelms et al's Morris 1, 2100 varas NE along NW line of W corner and 2100 varas at right angles of said line, sd 625 ft; Bay 1, 5900 varas NE along NW line and 1000 varas at right angles with said line, last returns in dome 915 ft. Jas. W. Rich's Dennis 2, 30 ft S of No. 1 and 5 miles W of Wharton, dr 100 ft; Brown 1, 50 ft each way from SW cor of W. Brown 20-acre tract on GH&SA of James Murray sur, dr 957 ft in sandy shale, gas show.

CALCASIEU PARISH — Vacuum Oil Co.'s Freiberg & Wolfe 1, 780 ft S and 685 ft E of NE cor of SW quarter of sec 9, wt on rig 4669 ft; No. 2, washing out sand; Miller 5, 300 ft due west of Miller 2, milling 4433 ft; Miller 6, 475 ft N and 11 ft W of center of sec 9, twp 9s, range 10w, completed 3300 bbls 24.3 gravity oil 4457 ft; Miller 7, 500 ft W of No. 3, 2357 rock; Miller 8, 400 ft N of No. 3, showing oil 2918 ft sandy shale; Miller 9, 400 ft N and 100 ft E of No. 4, set 9-inch cas 3163 ft; Farquhar 3, 175 ft W and 100 ft N of SE corner of SW quarter of NW quarter of sec 9, dr 2398 ft in hard sand.

ST. MARTIN'S PARISH — Rycade Oil Corp.'s Atchafalaya 1, sec 18-9s-9e and 600 ft E of Gulf's No. 3, rigging.

ST. MARY'S PARISH—Rio Bravo Oil Co.'s Glendwild 1, on Glendwild 4500-acre plantation, fsh 3525 ft.

Oklahoma Wildcats

ATOKA COUNTY—Wapanucka Dev. Co.'s Underwood 1, C W L SE SE 28-15-10, sd 1343 ft. Hansen et al's Dabney 1, C SE NE 17-4-11, sd 3845 ft.

BECKHAM COUNTY—W. R. Duke's McGee 1, NWc SW SE 25-8-22, set 8¼-inch cas at 950 ft. Kadane et al's Van Vester 1, SEc NE NE 25-8-22, rig and tools.

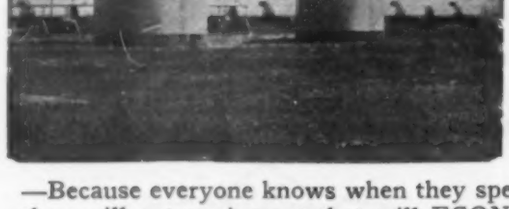
BLAINE COUNTY—Okama Oil Co.'s Eklemeir 1, SWc 21-15-10, sd 2610 ft.

CADDO COUNTY—Continental Diamond's Funk 1, SE SE 1-5-9, rig.

CANADIAN COUNTY — Thos. Revelle's Dawson 1, NEc SE NW 34-13-9, ur 5-inch cas 3680 ft. O. D. Jones' Sanders 1, C NE NE NE 29-11-7, sd 2150 ft.

COMANCHE COUNTY—Mid-Kansas O. & G. Co.'s Hendricks 1, C S L SE 33-3-10, sd 1812 ft. Becker & Reed's Hind 1, NEc NW 30-4-10, dr 800 ft. J. R. Abernathy's 1, NEc NW 24-5-11, lcn. Mid-Kansas' Cox 1, NEc SE NE 30-1-13, fsh 1242 ft.

GARFIELD COUNTY—Bu-Vi-Bar's Johnson 1, SWc 31-23-4, dr 2505 ft. Sinclair's Fee 1, SWc SW NE 2-20-5, dr 3004 ft. Wilcox



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O. & G. Co., Zalondek 1, C SE SE SE 22-26-5, dr 1210 ft.

GRADY COUNTY—Becker-Reed Oil Co.'s Brown 1, C NW NE 29-6-7, std 2046 ft.

GRANT COUNTY—Dedman, Flannagan & Hennage's Sherrer 1, NEc SW 16-26-3, sd 515 ft. Lambert & Mink's Tabor 1, C SE NE SE 23-26-3, spd and sd. Gypsy Oil Co.'s Meugge 1, SEc NW 33-26-3, dr 2350 ft.

HARPER COUNTY—Hoffer Oil Co.'s Cooper 1, NW SE 14-25-22, dr 1450 ft.

HUGHES COUNTY — Parmenter et al's Stewart 1, C SE SW SW 14-7-9, rig. Henry Greis & Kerr's Pearson 1, C SE NE NE 30-5-4, cd 3500 ft. Sands Pet. Co.'s McGeeley 1, NEc SE 10-8-9, no report.

JEFFERSON COUNTY — Godley Oil Co.'s Woodworth 1, C NE NW 36-5-4, co 3204 ft. Oasis' Major 1, C SE SW 34-5-6, spd and sd.

KAY COUNTY—Tonkawa Dev. Co.'s McDaniels 1, C SE SE 15-25-1, sd 880 ft. Souligny Bros.' School land 1, NEc NW 16-26-3, dr 3160 ft. Davis Drilling Co.'s Street 1, C NE NE NE 31-28-3, no report.

KINGFISHER COUNTY—Bu-Vi-Bar's No. 1, SEc NW 11-19-9, lcn.

LINCOLN COUNTY—Douglas Oil Corp.'s Ewing 1, NWc 7-13-3, dr 4515 ft. Ruby et al's Cull 1, NEc NW 36-15-4, sd 4721 ft. Carter Oil Co.'s Meeks 1, SWc 26-16-2, lcn. Flynn Morgan & Young's Writtenhouse 1, NWc SE 26-16-5, dr 895 ft.

LOGAN COUNTY—Blackford O. & G. Co.'s Lair 1, C S L N½ NE 28-16-1, sd 1675 ft. Haley & Pioneers' Quair 1, SWc SE 33-18-3, sd 1557 ft. Franklin Oil Assn.'s Moore 1, SWc SE 28-18-4, dr 3620 ft. Bryan & Emery's No. 1, NWc SE 33-19-4, rig.

LOVE COUNTY—Smyer & Stein's Gray 1, C SE SE 19-9-1, dr 1420 ft.

MAJOR COUNTY—Frantz & Slick's Gray 1, C NW 36-21-11, sd 1000 ft. Texas Prod. Oil Co.'s Cheyenne Basin 1. SWc 6-22-14, sd 200 ft.

MARSHALL COUNTY — Ramsey Bros.' Griffin 1, SW SW 10-5-5, sd 1415 ft. United "8" Oil Co.'s Marshall 1, SW SW 30-5-6, sd 585 ft.

POTTAWATOMIE COUNTY — Davis Detrick's McCathy 1, SEc NW 10-6-2, td 3860 ft. J. L. Patterson's Smith 1, NE SW SE 32-9-4, no report. Shaffer et al's Ives 1, NWc SE SE 12-10-3, dr 2300 ft. McCullough's Madgett 1, NWc 25-10-4, dr 1850 ft. Central National Oil Co.'s Toney 1, C SW SW SW 28-10-4, sd 755 ft. Holmand Osmand et al's Fiddler 1, SEc NW 4-5-5, sd 545 ft. Independent O. & G. Co.'s Ingram 1, SWc NE 10-9-5, no report. The Texas Co.'s Allenbaugh 1, SEc SW 3-11-5, ur 5-inch cas 4725 ft.

SEMINOLE COUNTY—Bryan Bros.' Sam Walker 1, C SE SE SE 4-7-6, shot 30 qts, co td 2763 ft. Pure Oil Co.'s Jonah 1, C E L NW NW NE 15-9-7, ur 2125 ft.

TILLMAN COUNTY—Oasis Drilling Co.'s Snelling 1, SEc SE SE 13-1-6, dr 950 ft. Tipton et al's Riverbed 1, C NE NE 1-5-5, sd 2918 ft.

TEXAS COUNTY—Wilcox O. & G. Co.'s Horey 1, SEc 21-4-14, dr 360 ft; Del 1, SWc SE 26-3-13, td 2350 ft. Reiter & Foster's No. 1, SEc SW 9-13-15, skidding ¾ mile north. Garber & Pulse 1, SEc 4-1-12, dr 125 ft. Valerius O. & G. Co.'s Hughes 1, NWc SW 18-3-12, sd 100 ft.

Kansas Wildcats

BARBER COUNTY—R. B. Brown's Martin 1, NWc 14-34-11, sd 1500 ft.

BARTON COUNTY—John Herron's Everleigh 1, SEc NE 22-18-3, sd 4550 ft. Huffins et al's Smith 1, C NE SE NE 17-19-11, dr 4200 ft.

BUTLER COUNTY—Eyessen's Varner 1, NEc SW 29-25-4, lcn. Manhattan Oil Corp.'s Daley 1, SWc SE 25-24-6, lcn; Potts 1, NEc 29-24-7, rig. W. M. Neeley O. & G. Co.'s Kiser 1, SW SE SW 12-26-7, dr 1250 ft.

CHASE COUNTY—Derby Oil Co.'s Newman 1, NWc SW 24-20-9, dr 940 ft.

CHAUTAUQUA COUNTY—Blackwell O. & G. Co.'s McKown 1, NWc SE 31-32-10, showing at 2290 ft.

CLOUD COUNTY—Concordie Oil & Prod. Co.'s Murdock 1, SEc 6-6-4, sd 3030 ft.

COWLEY COUNTY—Pettee & Banks' Withers 1, NEc NW 32-30-5, dr 2241 ft. Phillips Pet. Co.'s Hunt 1, NEc 16-34-5, setting 6-inch at 3290 ft. Branson et al's White 1, SEc SW SW 7-30-6, spud and sd. S. H. E. Petroleum Co.'s Day 1, NE NW 24-34-6, ur 6-inch 2450 ft.

ELK COUNTY—I. T. I. O. Co.'s Cummings 1, C NW NW 31-30-10, sd 1530 ft. Roy Shaples et al's Howard 1, SW NE 14-34-9, dr 1450 ft.

GRAHAM COUNTY—Gruien & Shilers' Baker 1, NWc SE NW 17-10-24, rig.

LYON COUNTY—Connell et al's Ball 1, SEc SW NW 23-18-10, lcn. Culp et al's No. 1, SWc SE 25-19-10, rig. Bush's Eskridge 1, NE SE 36-19-11, rig. Troxell et al's Williams 1, NE SW 12-20-10, dr 285 ft. Gordon et al's Stilwell 1, SEc 24-20-11, lcn. Connell et al's Lewis 1, SWc 4-20-11, lcn. Miss. Valley Oil Co.'s Neuman 1, C SW SE 25-20-11, lcn. R. G. Gillespie's Flading 1, SWc NE 9-20-12, dr 735 ft. Connell et al's Welch 1, NEc SW 22-20-12, spudding. Gashe & Balliere's Stratton 1, SEc NW 32-20-13, lcn. Haviland et al's No. 1, SE NE NE 7-20-13, lcn. Sheedy et al's Morris 1, NWc SE 19-21-10, dr 1275 ft. S. W. Petroleum's Vorhees 1, SWc NW 34-21-10, fsh 1175 ft. Miss. Valley Oil Co.'s Langley 1, C SW SE 4-21-11, rig. Swartz's Tiles 1, SEc SW 29-21-12, rig. Phillips Pet. Co.'s Shepard 1, SW NW 29-21-13, cellar.

OSAGE COUNTY—Baker et al's Lease 1, C SE SE 3-15-15, sd 260 ft. Rogers & Bittle's Bertha 1, SEc NW SE 28-17-15, lcn. Mull-Vit Dev. Co., Neil 1, NWc NE SW NW 8-17-17 sd 2835 ft.

RENO COUNTY—Frank Hopper's Stevens 1, NWc 7-26-7, ur 8-inch 2755 ft.

ROOKS COUNTY—Keys Pet. Co.'s Saidon 1, NWc SW SE 7-2-20, spud. C. Findeiss et al's Minx 1, SWc 25-10-9, sd 3669 ft.

SALINE COUNTY—Thrall et al's Halquest 1, SEc NE NE 15-15-4, sd 1010.

SUMNER COUNTY—Roxana Pet. Corp.'s Miller 1, NE SW 17-32-2, swab 35 bbls, 2950-60 ft. Wentz's Schwartz 1, NWc NE NE 27-34-2, spud.

WABAUNSEE COUNTY—Williams et al's Henderson 1, NEc SW NE 15-13-12, sd 3600 ft. Ramsey Pet. Co.'s Kaul 1, SEc NE NE 2-11-11, dr 2005 ft.

WOODSON COUNTY—Alter et al's Hunt 1, NWc SW 13-25-14, sd 700 ft.

Louisiana Wildcats

BOSSIER PARISH—Arkansas Fuel Oil Co.'s Murray 1, 14-23-14, dr 2025 ft. Benton Synd.'s Bulkley 1, 9-20-13, sw 1182 ft. Collins & Woodley's Kilburn 1, 18-19-13, dr 2110 ft. Square Deal Oil Co.'s Hale 1, 17-18-11, set 6 inch 1227 ft.

CADDO PARISH—Dixie Oil Co.'s Jolley 1, 27-22-15, dr 3885 ft; Robershaw 71, 14-21-15, dr 2440 ft. Fortuna Oil Co.'s Bradford 1, 24-21-15, dr 2450 ft; Levee Board 2, 8-20-15, cas collapsed 2895 ft; Spell 1, 29-21-15, dr 2808 ft. Gulf Ref. Co.'s Lane 17, 13-21-15, set 4½-inch 3588 ft; Muslow 1, 30-21-15, dr 2145 ft; Tyson 1, 14-21-15, dr 1075 ft. Ohio Oil Co.'s Ardis 1, 1-21-15, dr 4015 ft; E. K. Smith 18, 12-21-15, dr 3830 ft; E. K. Smith 19, 12-21-15, dk. D. C. Richardson's Youree-Randolph 3, 13-20-15, rig. The Texas Co.'s Caddo Mineral Lands 42, 23-21-15, set 8-inch 2400 ft; Federal-Jeems Bayou B-1, 15-20-15, dr 3885 ft.

CALDWELL PARISH—Alexander et al's Cruse 1, 6-11-4e, dk.

CLAIBORNE PARISH—Triangle Drilling Co.'s Cupp 1, 22-23-5, sd 300 ft; Keen 1, 7-19-5, dr 3870 ft.

DE SOTO PARISH—Dixie Oil Co.'s Jenkins 1, 9-12-11, ur 6⅝-inch, 3354 ft. Dresser et al's Williamson 1, 29-15-14, rig. Magnolia Pet. Co.'s Bond 1, 27-12-11, dry 2628 ft; to deepen. J. C. Walton's Harp 1, 36-12-11, dr 2565 ft.

GRANT PARISH—Dowling & McCurry's Holmes 1, 20-9-1e, sw 1616 ft. Holmes et al's Swope 1, 18-9-2e, rig.

LINCOLN PARISH—Buckley & Palmer's Davis 1, 12-20-3w, sd 1500 ft. The Texas Co.'s Tremont Lumber Co. 1, 27-18-1w, fresh water 728 ft; skidding over.

MOREHOUSE PARISH—Boisseau et al's Sullivan 1, 11-21-7e, rep dk 2510 ft.

OUACHITA PARISH—Culver et al's Cordell 1, 23-15-3e, sd 1360 ft. Dickson & Frue's Goodwin 1, 24-18-2e, sd 3036 ft. Southern Carbon Co.'s Jones 1, 6-16-5e, sd 3090 ft.

RAPIDES PARISH—Hincy & Mack's Barrow 1, 29-5-2e, sd 1250 ft. Wheeler et al's Lanier 1, 3-4-3e, dr 1300 ft.

SABINE PARISH—Emlet et al's Bowman-Hicks 5, 8-7-12, dr 3245 ft; Bowman-Hicks 7, 11-7-14, rig. Toro Pet. Co.'s Pickering 1, 24-4-12, sw 1548 ft.

UNION PARISH—Arkansas Fuel Oil Co.'s Reeves 1, 14-20-1e, dr 2390 ft.

WEBSTER PARISH—Arkansas Fuel Oil Co.'s Miller 1, 30-23-9, dr 1000 ft. Doern et al's Bolinger 1, 9-22-11, rig. Fortuna Oil Co.'s Bible 1, 8-20-9, set 6-inch 4281 ft. Humble O. & R. Co.'s Cox 1, 22-21-10, fsh 4214 ft. Magnolia Pet. Co.'s Sexton 1, 32-23-9, dk. Ohio Oil Co.'s Cox 1, 23-21-10, coring 4725 ft.

WINN PARISH—Cedar Creek Pet. Co.'s Sullivan 1, 6-10-2w, sw 717 ft; to deepen. Cherokee Pet. Co.'s Urania 1, 13-11-1e, rig. J. R. Hale's Eagle 1, 6-10-2w, set 6-inch 950 ft.

Arkansas Wildcats

COMPLETIONS

Company, Well and Location	Initial Production Bbls.	Depth
Bradley County—		
Gulf Ref. Co. Benson 1, 25-15-9....	*	3360
Hempstead County—		
C. W. Robinson Toner 1, 29-12-23...	*	2900
Miller County—		
Humble O. & R. Co. Big Pine 1, 33-17-27	*	1714

DRILLING REPORT

ASHLEY COUNTY—Pine Prairie Oil Co.'s Pine Prairie 2, 1-17-6, dk. Rhodes et al's Bledsoe 1, 20-15-7, sw, sd 2554 ft.

CALHOUN COUNTY—Magnolia Pet. Co.'s Calion 1, 29-15-14, dr 4025 ft. Southern Crude Oil Purch. Co.'s Calion 1, 1-16-14, dk.

CLARK COUNTY—Heath et al's Arnold 1, 12-9-20, skidding rig. Wheelen Oil Co.'s Brown 1, 35-10-20, sd 1800 ft.

CLEVELAND COUNTY—Dedman et al's Moore 1, 28-9-10, sd 1757 ft.

COLUMBIA COUNTY — H. W. Aarnes' Brown 2, 13-15-20, coring 3212 ft. Kent & Fullenwider's Wingfield-Moody 1, 18-19-19, lcn. Ky-Ark Pet. Co.'s Doss 1, 29-19-20, sd 1485 ft. Phillips et al's Davis 1, 14-18-21, sd 2850 ft. Pluto Oil Co.'s Robinson 2, 23-18-23, set 8-inch 900 ft.

DALLAS COUNTY—McNiel et al's Owens 1, 29-10-16, sd 2100 ft.

DREW COUNTY—McClintock et al's Ogle 1, 35-13-5, sd 1842 ft.

HEMPSTEAD COUNTY—Burton et al's Garland 1, 23-10-25, dr 1865 ft.

LA FAYETTE COUNTY—Arkansas Fuel Oil Co.'s Red River 1, 18-19-24, to blow well with air, 2790 ft; Red River 2, 18-19-24, sd 2811 ft, sw 2789 ft. Humble O. & R. Co.'s Bodcau Fee 3, 19-16-23, lcn. Ken-Saw Pet. Co.'s Red River Valley 2, 3-20-24, fsh 2820 ft.

LITTLE RIVER COUNTY—Grote et al's Allen 1, 2-13-29, sw 2952 ft.

MILLER COUNTY—Buzzard Bluff Oil Co.'s Gillespie 1, 22-14-26, dr 2415 ft. Copeland et al's Wiseman 1, 36-15-27, fsh 2650 ft. Lenze et al's Dale 1, 25-15-26, abn, 1180 ft; skidding over.

NEVADA COUNTY—Greeson et al's Tidwell 1, 22-13-21, dr 1105 ft. Humble O. & R. Co.'s Calloway 2, 10-15-22, coring 1235 ft. Magnolia Pet. Co.'s Johnson 1, 3-15-21, dr 4520 ft.

OUACHITA COUNTY—Buffalo Oil Co.'s Davis 2, 22-15-19, dr 1500 ft. Equity Oil & Dev. Co.'s Morgan 1, 27-15-19, set 6-inch 2068 ft. Gossett et al's Cosden 1, 21-15-19, wosr 1460 ft; Davis 1, 26-15-19, sd 1672 ft; Thompson 1, 22-15-19, sd 1465 ft. Harrell et al's Moline Timber 1, 32-11-17, sd 40 ft. Louisiana Oil Ref. Corp.'s Green 1, 22-15-19, wosr 1555 ft. Van Diver et al's Yarbrough 1, 22-14-17, sd 1600 ft. J. D. Reynolds' Davis 1, 22-15-19, sw 1516 ft, sd; Thompson 1, 22-15-19, dr 6⅝-inch plug 1412 ft.

UNION COUNTY—Allison et al's Fitzgerald 1, 17-18-15, sw 2824 ft, dr 2960 ft. Bondurant et al's Garner 1, 8-18-12, sd 1820 ft.

PERMITS GRANTED FOR NEW WELLS

Weekly Comparison of New Wells

Following is a condensed table giving a comparison of permits or locations made for new wells in Kansas, Oklahoma, Arkansas, Louisiana, Texas and California:

Number of Wells for Week Ending

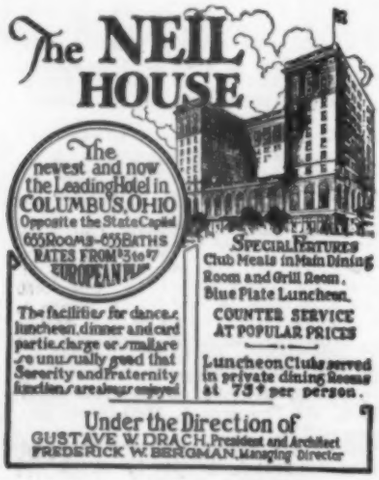
	Dec. 4	Dec. 11	Dec. 18	Dec. 25	Jan. 1	Jan. 8	Jan. 15	Jan. 22	Jan. 29	Feb. 5	Feb. 12	Feb. 19	Feb. 26	Mar. 5	Mar. 12	Mar. 19
Kansas	29	35	28	32	40	30	23	28	44	24	31	59	30	18	37	55
Oklahoma	86	73	75	95	76	78	60	92	85	71	85	100	66	140	91	114
Arkansas	10	22	11	15	10	18	10	12	13	28	11	28	13	28	21	31
Louisiana	17	15	15	7	12	15	17	20	23	23	37	23	21	32	55	29
Texas	253	203	210	199	167	111	162	153	150	146	176	201	233	170	244	234
California	23	22	42	40	17	25	28	35	35	31	34	26	35	34	19	41
Total	418	370	381	388	322	277	300	340	350	323	374	437	398	422	467	504

OKLAHOMA

Carter County—Magnolia Pet. Company No. 10 E. Lohman, center of the southwest of the northeast of the southeast of 23-2s-3w. Merrick-Cameron No. 1 Nicholson, southwest corner of the northeast of the northeast of 9-3s-2w.

Creek County — F. R. Billingslea No. 1 James Wright, southeast corner of 17-17-8. Waite Phillips No. 3 Cobb, northeast corner of the southwest of the southwest of 26-17-8; Phillips No. 4 Cobb, southwest corner of 26-17-8. Magnolia Pet. Company No. 11 Nora Williams, old well deepened, northeast corner of the southwest of the northwest of 10-16-7. Redgrove et al No. 1 Snow, northwest corner of the southwest of the northwest of the southeast of 15-18-11. Gypsy Oil Company No. 14 Gray, old well deepened, northeast corner of the southeast of the northwest of 6-18-12; No. 18 Gray, center of the east line of the southwest of the northwest of 6-18-12. Industrial Oil Company No. 2-A Sango, center of the west line of the southeast of the northwest of 6-18-12. Texas Pacific Coal & Oil Company No. 7 Harjoche, northeast corner of the southeast of 21-17-9. M. P. Evans et al No. 1 Littlehead, northwest corner of the southwest of the northwest of 16-17-10. J. H. Wright No. 10 Dawson, center of the north line of the southeast of the southwest of 24-17-10. Ireland et al No. 6 Freeman, center of the northwest of the southeast of 8-17-11. Sherry et al No. 1 Unallotted, southeast corner of the northwest of the northeast of 12-16-10. Wood Oil Company No. 2 Craig, center of the southeast of the northeast of the southeast of 30-14-10.

Garfield County—Failing and Lawson No. 1 Disney, northwest corner of 24-24-3w. Sinclair Oil & Gas Company No. 32 Hartley, center of the northeast of the southwest of the northwest of 18-22-3w; No. 6 Whitney, old well deepened, northeast corner of the southwest of the northwest of the northeast of 18-22-3w.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Garvin County—Hall & Briscoe No. 2 Moss, center of the southwest of the northeast of 11-4n-8w. Pauline, Clark and Cowden No. 1 Shortles, northeast corner of 11-3e-8w. Garvin Drilling Company No. 1 Dutton, center of the southwest of the southwest of the northwest of 5-3n-5w. Clark and Cowden No. 2 Kilgore, southeast corner of the northwest of the northwest of 27-3n-5w. White Eagle Oil & Ref. Company No. 1 Mosley, northwest corner of the northeast of the southwest of 27-3n-5w.

Hughes County—Mid-Continent Pet. Corp., No. 1 Harjo, northwest corner of the southwest of the northwest of 13-8-9. Magnolia Pet. Company No. 1 Skinner, southeast corner of the southwest of the northeast of 29-8-9. Kingwood Oil Company No. 1 Lowe, northwest corner of the southeast of the southeast of 29-8-9. Papoose Oil Company No. 1 Corboge, southeast corner of the northeast of the southwest of 29-8-9.

Jefferson County—Couche & Brown No. 1 O. W. Seay, southeast corner of the southwest of 28-6s-5w.

Kiowa County—Landfair and others No. 1, southeast corner of the southwest of the southeast of 6-2s-16w.

Lincoln County—Magnolia Pet. Company No. 4 A. E. Sproleder, southwest corner of the northeast of the southeast of 34-15-5; No. 8 M & F Sproleder, northwest corner of the southeast of the southeast of 34-15-5. Mid-Continent Oil Corp. No. 5 Earp, southwest corner of the northwest of 8-15-6. The Texas Company No. 2 Hopkins "C," southwest corner of the southeast of the southeast of 2-14-5. Twin State Oil Company No. 9 Bigwater, center of the northeast of the northwest of 2-14-5. Gypsy Oil Company No. 12 Caves, northwest corner of the southeast of the northwest of 11-14-5; No. 13 Caves, northeast corner of the southeast of the northwest of 11-14-5.

Marshall County—Gill et al No. 1 Sacra, southeast corner of the northeast of the southeast of 21-5s-5e.

Muskogee County—C. M. Bradley No. 1 E. M. Garrett, northeast corner of the northwest of 33-15-8e.

Okfuskee County—Central National Oil Company No. 3 Canore, old well deepened, northwest corner of the southeast of 13-12-11. Windsor Oil Company No. 8 Holmes, center of the southeast of the northeast of the northwest of 22-11-11. Frank Hevel No. 1 Lekowski, northeast corner of the northwest of the southwest of 23-11-11. T. A. Johnson and Umburn No. 1 Robinson, southwest corner of 1-10-11.

Okmulgee County — Leonard Pet. Company No. 3 Grant, center of the west line of the southwest of 19-16-13. J. J. Deaner No. 1 Nubbie, northeast corner of 34-15-12. W. E. Holmes No. 1 Farmer, northeast corner of the southeast of the southeast of 7-14-11. Gray Oil Company No. 1-A Densen, northwest corner of the northeast of the southeast of 14-14-12. A. J. Hazlett No. 1 Skelton, northeast corner of the northwest of 36-14-12. Vierson et al No. 1 Tiger, old well deepened, northwest corner of the southwest of the southeast of 4-12-12. Colorado Oil & Gas Company No. 2 G. Ashbury, northeast corner of the southwest of the southeast of 32-11-12. A. W. Cline No. 1 D. Harrison, northeast corner of the southeast of the northwest of 19-15-14, old well deepened. Papoose Oil Company No. 7 C. Rentie, center of the east line of the southwest of the southwest of 11-14-14. J. E. Wallace No. 2 Rentie, center of the west line of the southeast of the southwest of 11-14-14. Mechling No. 3 C. Colbert, center of the west line of the northeast of the northeast of 14-14-14. R. G. Rapp No. 4 N. Lee, center of the southwest of the northeast of 30-13-13. Clarion Oil Company No. 6 W. M. Hill, southeast corner of the southwest of the southeast of 27-13-14. Nicholson Corp. No. 2 L. Canard, southwest corner of the northwest of the southeast of 13-11-13.

Osage County—Phillips Pet. Company No. 13, northwest corner of the southeast of 2-27-5. Skelly Oil Company No. 8, northwest corner of the northeast of the southwest of 2-27-5. Skelton-Moore No. 9, southwest corner of the northwest of the southeast of 32-26-12. Sinclair Oil & Gas Company No. 3, southeast corner of the northeast of the southwest of 21-25-6. Plymouth Pet. Company No. 4, center of the south line of the southeast of 36-25-11. Peters Petroleum Company No. 4, northeast of the southeast of the southwest of 28-24-10. Continental Oil Company No. 1, center of the southeast of the northwest of 12-23-8. Sand Springs Home No. 1, northwest corner of the northeast of 14-20-10. Continental Oil Company No. 14, southwest corner of the southeast of the northwest of the northwest of 29-20-12. Westland Oil Company No. 1-A, northeast corner of the southeast of 29-20-12.

Pawnee County—Adamson Coal, Oil & Gas Company No. 3 Myers, center of the west line of the northeast of the southwest of 32-21-8.

Payne County—Mid-Continent Pet. Corp. No. 1 Erwin, southeast corner of the southwest of the southeast of 14-19-4. Magnolia Pet. Company No. 4 Pleasants, southwest corner of the northeast of the northwest of 24-19-4; No. 5 northwest corner of the southeast of the northwest of 24-19-4; No. 6, northeast corner of the southwest of the northwest of 24-19-4. Twin State Oil Company No. 2 M. Gene, northwest corner of the southeast of the northwest of 14-19-5.

Pontotoc County—Boles & Smith No. 1 Nelson, old well deepened, northwest corner of the southeast of 34-5n-6e.

Seminole County — Indian Territory Illuminating Oil Company No. 1 B. Carter, southwest corner of the northeast of 24-9-6. Amerada Pet. Corp. No. 1 Dyer, northwest corner of the northeast of the southeast of 24-9-6. Tidal Osage Oil Company No. 1 Pahardy, northeast corner of the southwest of 24-9-6. Waite Phillips No. 1 M. B. Carter, southeast corner of the northwest of 24-9-6. Independent Oil &

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P

P E T R E C O

Gas Company and Tidal Osage Oil Company No. 1 Fixico, southwest corner of the northeast of 26-9-6. Magnolia Pet. Company No. 1 Goody, southwest corner of the southeast of the southeast of 18-9-7. Independent, Jarvis & Holmes No. 1 Cobb, southwest corner of the northeast of the southeast of 7-9-8; No. 2 Cobb, southwest corner of the northwest of 8-9-8. Phillips Pet. Company No. 2 Buckner, northwest corner of the southwest of 8-9-8. Oklavania Oil Company No. 1 S. Island, northeast corner of the northwest of the southeast of 18-9-8. Gypsy Oil Company No. 1 Jefferson, northeast corner of the southwest of the northeast of 18-9-8. Magnolia Pet. Company No. 1 King, southwest corner of the northwest of 18-9-8. Southwestern Pet. Company No. 2 Peter, northwest corner of the southeast of the northeast of 18-9-8. Shaffer Oil & Refining Company No. 3 W. Jefferson, center of the southwest of the northeast of the northeast of 18-9-8. Magnolia Pet. Company No. 1 Mothoye, southeast corner of the northwest of 17-8-6. Gypsy Oil Company No. 1 Davis, southwest of the northwest of the southeast of the northwest of 14-8-7. T. B. Slick No. 4 Jackson, northwest corner of the northeast of the southwest of 14-8-7. Dixie Oil Company No. 1 C. C. Logan, northwest corner of the northeast of the southeast of 25-8-7. W. R. Ramsey No. 1 Mulliah, northeast corner of 26-8-7. Magnolia Pet. Company No. 3 Walker, old well deepened, center of the southwest of the southeast of the southwest of 29-8-8. W. R. Ramsey No. 1 Salinda, old well deepened, northeast corner of the northwest of the southeast of 31-8-8. Magnolia Pet. Company No. 6 Harjo, northwest corner of the southwest of the northwest of 5-7-8. Homaokla Oil Company No. 2 Carolina, northwest corner of the southeast of the northeast of 6-7-8. Magnolia and Atlantic Oil Producing Company No. 4 J. Davis, northwest corner of the northeast of the northeast of 6-7-8. Magnolia Pet. Company No. 1 Hawkins, southwest corner of the northeast of 6-7-8; No. 2 Hawkins, southeast corner of the southwest of the northeast of 6-7-8.

Stephens County—Lewis, Clark Pet. Company and C. E. McCaughtry No. 1 Jefferson, center of the northwest of the southeast of the northeast of 31-2n-4w; No. 1 Morgan, center of the northeast of the southeast of the northeast of 6-1n-4w. Garvin Drilling Company No. 1 Branch, northeast corner of the southeast of the southeast of 26-1s-9w. Magnolia Pet. Company No. 11 Dolly Bartley, southwest corner of the northwest of the southeast of the northwest of 20-1s-8w; No. 1 Lena Johnson, northeast corner of the northwest of 21-2s-7w.

Tulsa County — Green and others No. 1-A Drew, center of the northeast of the northwest of 28-18-14. Sac & Fox No. 4 Mackey, northeast corner of the southwest of the northwest of 33-18-14. Selby Oil & Gas Company No. 7 Russell, center of the north line of the northwest of the southeast of 4-16-13. Petroleum Drilling Company No. 13 Buck, center of the south line of the southwest of the northeast of 4-16-13.

Wagoner County—Iron Mountain Oil Company No. 1 J. Scales, southeast corner of the northwest of 29-18-16. Larsarskey and others No. 4 M. White, northeast corner of the southeast of the northeast of 25-17-16. Perry & Hartmen No. 1 S. Childers, northeast corner of the northwest of 29-17-16. M. T. L. Oil Company No. 1 M. Clark, southeast corner of the northwest of 16-17-18. B. B. Wheeler et al No. 1 T. Chissee, center of the south line of the southwest of the northeast of the southeast of 8-16-18.

KANSAS

Butler County—Vickers and Miller No. 1 Ott, southwest corner of the southeast of 35-32-14w. Skelly Oil Company No. 1 Drohen, old well deepened, northeast corner of 14-25-3e. Connell Oil Company No. 3 Wilhite, northwest corner of the southwest of 27-26-7. White Eagle Oil & Ref. Company No. 3 Wilhite, northeast corner of the southwest of 27-26-7; No. 4 Wilhite, southeast corner of the northeast of the southwest of 27-26-7. Safford et al No. 7 Safford, northeast corner of the southeast of the southeast of 26-27-4. Phillips Pet. Company No. 1 Tatu, southwest corner of the northwest of 9-27-6. Federal Oil Company No. 5 Laughlin, southwest corner of the northeast of the northeast of 33-27-7. Lewis Oil Company No. 3 Laughlin, southeast corner of the northwest of the northeast of 33-27-7. Matthews et al No. 1 Walkiman, northeast corner of the southwest of 32-29-6.

Coffey County—Peerless Oil & Ref. Company No. 1 Reed, center of the north line of the south half of the southeast of 25-22-14e.

Cowley County—Lewis Oil Company No. 1 Walker, southwest corner of the northeast of 31-30-6. Roth & Faourot No. 2 Sickles, northeast corner of the southwest of 20-31-5. Southwestern Pet. Company No. 11 Eastman, northwest corner of the southeast of the northeast of 6-31-6. Gypsy Oil Company No. 8 Shannon, southwest corner of the northeast of the northwest of 24-32-4; No. 9 Shannon, southwest corner of the southeast of the northwest of 24-32-4. J. A. Hull Company No. 15 Kukuk, center of the east line of the southeast of the northwest of the northeast of 24-32-4; No. 3 Lewis, northeast corner of the southwest of the northwest of 24-32-4. Gypsy No. 1 Lierman, northwest corner of the northeast of the northeast of 25-32-4. Duffield and others No. 3 Boyd, southwest corner of the northwest of the southwest of 19-32-5. Gypsy Oil Company No. 1 Martin, southeast corner of the northwest of 5-34-3. Roxana Pet. Corp. No. 1 Kimmel, old well deepened, northeast corner of the southwest of the northwest of 22-34-3e.

Elk County—Elk Pet. Company No. 6 Denton, center of the northwest of the southeast of 3-30-9. Gillespie No. 1 M. La Ville, northwest corner of the southwest of the southeast of 29-31-11.

Ellsworth County—C. J. Wrightsman No. 1 Herman, center of the southwest of 3-16-8w.

Greenwood County — Empire Gas & Fuel Company No. 5 Atyeo, northeast corner of the northeast of the northwest of 6-22-10; No. 6, Atyeo, northeast corner of the southeast of the northwest of 6-22-10. Kanson Oil Company No. 3 Atyeo, northwest corner of the southwest of the northeast of 6-22-10. Titus et al No. 14 Prather, southeast of the northeast of the southwest of the northwest of 29-22-10; No. 3 Prather, center of the east line of the northeast of 30-22-10. Empire No. 6 Pees, southwest corner of the southeast of the northeast of 15-22-11. Mid-Continent Pet. Corp. No. 8 Clopton, northeast corner of the northwest of the southwest of 18-22-11; No. 9 Clopton, northeast corner of the southeast of the southwest of 18-22-11. York State Oil Company No. 3 "C" De Malorie, southeast corner of the northwest of the northwest of 32-22-11. White Eagle Oil & Ref. Company No. 1 Shambaugh, northwest corner of the southwest of the northwest of 1-23-9. Theta Oil Company No. 12 Souder, center of the west line of the southwest of 3-23-13. Murphy No. 2 Linderman, northwest corner of 29-24-11. McGinnis et al No. 4 "A" Wiggins, southeast corner of the southwest of 19-24-11. Lassen et al No. 1 Oleson, southwest corner of the southwest corner of the southeast of 6-25-9. Lewis Oil Company No. 2 Coulter, southeast corner of the northwest of the southeast of 9-25-9. Continental Oil Company No. 2 Birkett, southeast corner of the northeast of the northeast of 23-26-9. Smith Wahn et al No. 1 Duke, northeast corner of the northwest of the northeast of 27-26-9.

Harper County — Bu-Vi-Bar Pet. Company No. 1 Catch, northeast corner of the southwest of the southwest of 22-34-6.

Kingman County—Phillips Pet. Company No. 1 Hampel, center of the southeast of 9-27-6w. Crawford and McKenna No. 1 Beshare, northeast corner of the northwest of 31-28-5w. Vickers and Sterns No. 1 Keiming, center of the northwest of 35-30-9w.

Lyon County—Reed et al No. 1 Stephens, southwest corner of the northwest of the northeast of 29-19-10; No. 1 Campbell, northeast corner of the southeast of 19-19-13. Marland Oil Company No. 1 Sleisher, center of the north line of the northeast of the northwest of the northwest of 18-20-12. Rhodes, Parkins et al No. 1 Huntsinger, northeast corner of the northwest of the southeast of 31-21-11.

Reno County—Fleeger & Mid Kansas Oil & Gas Company No. 1 Nesley, southeast corner of the northwest of 35-23-7w. Mississippi Valley Oil Company No. 1 Rexroad, center of the northeast of 36-24-7w. Hartman & Skaer No. 1 Smith, center of the southwest of 24-24-8w. Cassoday Oil Company No. 1 High, center of the southeast of 9-25-7w.

Rice County—Hipple et al No. 1, Brothers, northwest corner of the southeast of 17-21-6w.

CALIFORNIA

Alameda County—Geo. L. Craig's 1, 14-3-3.
Devils Den—Devils Den Products Co.'s 3, 23-25-18.

Dominguez—Shell Co.'s Reyes 101, 33-3-13.
Huntington Beach—The United Oil Co.'s Pacific 1, 2-6-11.

Inglewood—Pacific Oil Co.'s 46, 17-2-14. Standard Oil Co.'s L. A. Investment 1 No. 42, 17-2-14.

Kern County—Milham Exploration Co.'s Pioneer 1, 32-11-22. Geo. F. Getty Inc.'s Marland 1, 20-27-27.

Kern River—Geo. F. Getty's Lenhardt 6, 14-28-27.

Long Beach—Davis & MacMillan Co.'s 11, 13-4-13. Wilshire Oil Co. Inc.'s Wilshire D-1, 13-4-13. California Pet. Corp.'s Jotham Bixby 1, 18-4-12. California Pet. Corp.'s Otto Comm. 1, 24-4-13. Marine Corp.'s 56, 13-4-13. Repetto Hills Pet. Corp.'s 5, 13-4-13. Walter P. Temple Oil Co.'s Olson 1 No. 3, 13-4-13. Sharp & Redick's 1, 13-4-13. San Martinez Oil Co.'s Booth Comm. 6, 29-4-12. J. E. O'Donnell's 55, 13-4-13. M. W. McVey's 1, 13-4-13. Harnaday Oil Co.'s 1, 13-4-13. J. R. Gray's 1, 18-4-12. W. C. Lance's 1, 13-4-13. George F. Getty Inc.'s L. B. 15, 13-4-13.

Midway—Honolulu Cons. Oil Co.'s 21, 4-32-24. Honolulu Cons. Oil Co.'s 42, 4-32-24. Pacific Oil Co.'s 54, 19-31-24. Pacific Oil Co.'s 15, 33-31-24. Pacific Oil Co.'s 42, 3-32-24. Pan American Pet. Co.'s 4, 19-31-23. Pan American Pet. Co.'s 5, 19-31-23. Valley Oil Co.'s 6, 14-31-22. Balboa Oil Co.'s 27, 24-31-23. Balboa Oil Co.'s 55, 24-31-23. Balboa Oil Co.'s 54, 24-31-33. Honolulu Cons. Oil Co.'s 48, 8-32-24.

Montebello—McGinley Oil Co.'s 3-B, 6-2-11. St. Helens Pet. Co. Ltd.'s Mulholland 3, 2-2-12.

Richfield—General Pet. Corp.'s Stern 6, 28-3-9.

Sunset—Lewis Pet. Co.'s G-M 13, 34-12-24.
Torrance—Fullerton Oil Co.'s Waddell 5, 8-4-13. Superior Oil Co.'s Torrance 29, 24-4-14.

ARKANSAS

Columbia County — Kent & Fullenwider's Wingfield-Moody 1, 18-19-19, 220 ft S and W of NEc NW¼ NE¼.

Miller County—Humble O. & R. Co.'s Big Pine 1, 33-17-27, 1200 ft S and 100 ft W of center of section.

Nevada County—Bemis et al's Ellis 4, 2-14-21, 150 ft S and 300 ft W of NEc SE¼ SE¼. Greeson et al's Groves 1, 2-14-21, 150 ft N and W of SEc SW¼ NE¼. Humble O. & R. Co.'s Calloway 2, 10-15-22, 1660 ft S and 1590 ft W of NEc of section; Groves 3, 2-14-21, SEc NE¼ SE¼.

Ouachita County—Gilliland Oil Co.'s *Kyle 8, 29-15-16, 330 ft S and 66 ft W of NEc SE¼ NW¼. Marine Oil Co.'s Umstead 10, 5-16-15, 660 ft S and 1120 ft W of NE of section. Meek Trust's LaGrone 3, 36-15-17, 660 ft S and W of NEc NE¼ SW¼. Southern Crude Oil Purch. Co.'s Umstead C-4, 4-16-15, center of south line N½ Lot 4 NW¼. Standard Oil Co.'s *Umstead 23, 32-15-15, NWc SE¼.

Union County—Atlantic Oil Prod. Co.'s Andres 2, 16-17-16, NEc SW¼ NE¼. Eason et al's *Palmer 3, 9-16-15, SEc W½ SE¼ SW¼. Grimes & Jones' Lovett 1, 6-18-14, center NE¼ NE¼ SE¼. Gulf Ref. Co.'s *Alphin 17, 2-16-15, 2970 ft N and 200 ft E of SWc of section; McMullen 3, 1-16-16, 200 ft N and 1120 ft W of SEc SE¼ SE¼. Humble O. & R. Co.'s *Flenniken B-3, 9-16-15, NEc NW¼ SW¼. E. M. Jones' *Murphy 4, 17-16-15, NWc NE¼ NE¼. Lion O & R. Co.'s Wilson 1, 17-16-15. C. E. Murdock's *Vestal 2, 17-16-15, 200 ft S and W of NEc NW¼ NE¼. Natural Gas & Fuel Corp.'s *Flenniken 2, 8-16-15. Owens et al's *Porter 1, 4-17-16, 200 ft N and E of SWc of section. Pure Oil Co.'s Bilyieu 6, 8-16-15, 200 ft S and 660 ft W of NEc of sec-

tion. Simms Oil Co.'s Dumas A-4, 9-17-16, 150 ft S and 200 ft W of NEc SW¼. Smitherman & McDonald's *Saxon B-2, 5-16-15, NEc Lot 8. Sunny Jim Oil Co.'s Flenniken 7, 9-17-15, center of north line S½ SW¼ SW¼. Unity Pet. Co.'s Bilyieu A-8, 8-16-15, 642 ft S and 700 ft W of NEc SW¼ NE¼. Wingfield et al's Slaughter 4, 9-17-16, NEc NW¼ SE¼; Slaughter 4, 917-16, NEc NW¼ SE¼; Slaughter A-1, 9-17-16, NWc SE¼ SE¼. Woodley Pet. Co.'s Dumas 1, 9-17-16, SEc NE¼ NW¼.

*Old wells to be deepened.

LOUISIANA

Bossier Parish—J. M. Hanby, Grace Larkin 2, 14-19n-11w, 628 ft S and 150 ft E of NW cor of NW¼ of SW¼.

Caddo Parish—H. J. Bussa et al, Hardeman 1, 24-22n-15w, 200 ft N and 600 ft E of center of sec. Gulf Ref. Co. of La., Levee Board U-5, 9-20n-16w, 4260 ft W and 300 ft N of SE cor of sec. Fortuna Oil Co., Raines 24, 22-21n-15w, 130 ft S and 115 ft W of NE cor of NE¼. Odell, Lawton et al, Red Bayou 6, 15-21n-15W, 275 ft S and 50 ft W of NE cor of SE¼ of NE¼. B. L. Spell, Tr., Thigpen & Herold 1, 10-21n-16w, 150 ft N and 410 ft E of SW cor of SE¼ of NW¼.

Calcasieu Parish—Green Oil Co., Moore 7, 28-9s-11w, 1000 ft S and 400 ft E of NW cor of sec. Vinton Oil Synd., Johnson 1, 3-11s-12w, 363 ft S and 50 ft E of NW cor of Sec.

De Soto Parish—Carl K. Dresser, W. F. Williamson 1, 29-15n-14w, 1320 ft S and 1320 ft E of center of sec.

La Salle Parish—Allison & Townsend, Bryant & Harvey 1, 26-10n-1e, 303 ft S and 40 ft W of NE cor of NE¼ of SE¼. Explorer Oil Corp., King et al 1, 36-10n-1e, 1470 ft E and 510 ft S of NW cor of Sec; King 2, 36-10n-1e, 1470 ft E and 150 ft S of NW cor of sec. Greenwall & Robinson, Tyler 1, 26-10n-1e, 786 ft N and 412 ft W of SE cor SE¼ of NE¼. Hardtner Oil Co., Urania Lbr. Co. 1, 7-10n-2e, 125 ft E and 125 ft N of SW cor SE¼ of SE¼. H. L. Hunt State 3, 26-10n-1e, 150 ft S and 350 ft E of NW cor NE¼ of NW¼. Galloway et al, Pendarvis 2, 23-10n-1e, 150 N and 150 ft W of SE cor of sec. Galloway et al, Pendarvis 3, 23-10n-1e, 510 ft W and 150 ft N of SE cor of sec. Little River Oil Co., S. E. Ratcliff et al 1, 26-10n-1e, 600 ft N and 200 ft W of SE cor NE¼ of SE¼. Louisiana Oil Ref. Corp., Tremont Lbr. Co. A-5, 35-10n-1e, 150 ft S and 150 ft W of NE cor NE¼ of NE¼; Tremont Lbr. Co. B29, 26-10n-1e, 150 ft N and 660 ft E of center of sec. L. N. Mistroe et al, Craddox and Russell No. 1, 26-10n-1e, 420 ft S and 311 ft W of NE cor NE¼ of SE¼. Minnesoto Oil Corp., J. M. Cotten 1, 25-9n-2e, 1980 ft W and 1620 ft N and of SE cor of sec; McWilliams and Foster, Russell 1, 25-10n-1e, 165 ft S and 760 ft E of NW cor of NW¼ of SE¼. Natural Gas & Fuel Corp., Frank Tullos 1, 26-10n-1e, 810 ft S and 150 ft W of NE cor of NW¼ of SE¼. W. & H. Oil Co., W. King 1, 36-10n-1e, 150 ft S and 150 ft E of NW cor of NE¼ of NE¼. J. H. Williams Drilling Co., Hebert 3, 26-10n-1e, 518 ft S and 291 ft W of Ne cor of SE¼ of NE¼.

Ouachita Parish—United Carbon Co., Wilson 1, 24-20n-4e, 1010 ft N and 2066 ft W of SE cor of sec.

Red River Parish—Kyle & Carnahan, Hollingsworth 1, 24-12n-11w, 225 ft N and 225 ft E of center of sec.

Winn Parish—C. H. Wilson, La. Central Lbr. Co. 1, 24-13n-1e, 200 ft N and 200 ft W of SE cor of NE¼ of SE¼.

TEXAS

Archer County—Roxana Pet. Corp., South Bend, C. A. Cockrell 4, 2433 TE&L sur, 150 ft to S and E lines; Mankins 1, B 40, Mangold sur, center. British American Oil Prod. Co., Wichita Falls, L. R. Murrah 1, S 3, D.C.S.L. sur, 150 ft to S and E lines. Trinity Townsite Co., 1215 Praetonian Bldg., Dallas, Mergargel 1, 2433 TE&L sur, 150 ft to S and E lines. Chenault, Palmer & Burch, Harvey-Snyder Bldg., Wichita Falls, A. H. Hammond 2, B 46, Amer. Trib. sur, 276 ft to N and 150 ft to W line. L. T. Burns, Wichita Falls, M. W.

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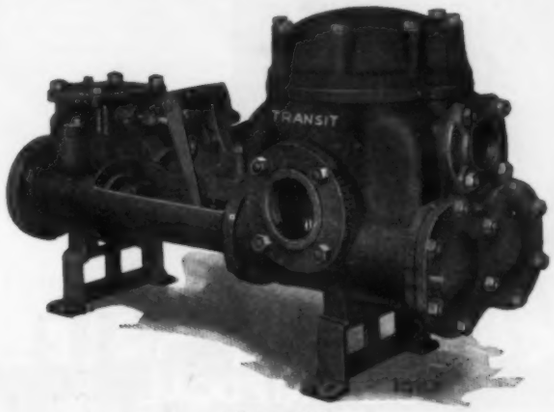

Figure 1093.
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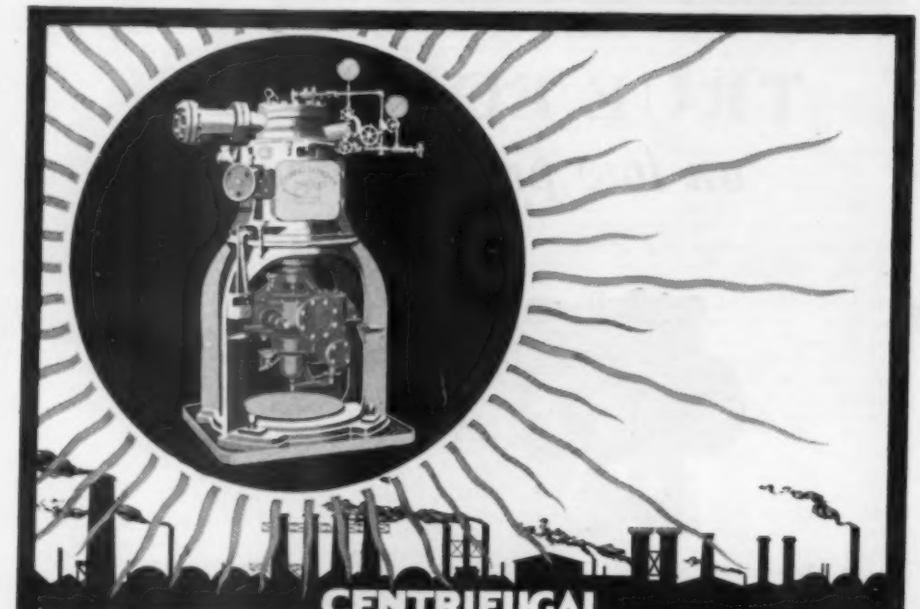

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Old Hickory, Tennessee

Jackson 1, B 16, W. B. Aldridge sur, 150 ft to N and W lines. Burns & Maxson, Wichita Falls, E. T. Brown 7, Amer. Trib. sur, 300 ft E No. 2. Texas Co., Wichita Falls, R. E. Hill 20, 2408 TE&L sur, 1183 ft to N and 932 ft to E line; B. R. Jeske 5, T. McCoy sur, 750 ft to W and 1114 ft to S line; 6, same sur, 584 ft S No. 5; Carter 12, Amer. Trib. sur, 300 ft S No. 11; R. V. Tidwell 7, J. A. Hopkins sur, 400 ft SW No. 2; L. F. Wilson 33, Amer. Trib. sur, 300 ft N No. 32. A. D. Montgomery, Staley Bldg., Wichita Falls, W. E. Hutchinson 6, B 123, Amer. Trib. sur, 150 ft to S and W lines. Ilseng Prod. Co.'s Fort Worth, R. O. Prideaux 1, B 16, Nicholson sur, 150 ft to N and W lines; R. O. Prideaux 5, B 14, Dorsey sur, 450 ft to S and W lines. Camp Oil & Gas Co., Harvey-Snyder Bldg., Wichita Falls, J. A. Bell 1, S 14, C&P sur, 150 ft to W and 322 ft to S line. Gulf Prod. Co., Fort Worth, D. W. Carter 1, S 12, W. E. Porter sur, 150 ft to N and W lines; L. W. Kunkel 7, TE&L 1593 sur, 300 ft W No. 6; B. R. Jeske 1, T. McCoy sur, 150 ft to S and E line; L. W. McCrory 5, S 75, Amer. Trib. sur, 400 ft S No. 4; C. L. Abercrombie 1, S 2, S. P. Ry sur, 150 ft to S and W lines; A. P. Nichols 29, S 37, Amer. Trib. sur, 400 ft W No. 25. Texas Unity Oil Co., Magnolia Bldg., Dallas, J. Kreeger. 1, 2434 TE&L sur, 150 ft to S and W lines. F. H. Gohlke, Box 347, Wichita Falls, L. McCrory 1, B 247, Amer. Trib. sur, center. L. P. Hammond, Staley Bldg., Wichita Falls, S. E. Oldham 3, E. Hubble sur, 300 ft N No. 1. Waite Phillips Co., Tulsa, Okla., A. J. Lowe 2, 2402 TE&L sur, 308 ft W No. 1. Atlantic Oil Prod. Co., Magnolia Bldg., Dallas, S. E. Oldham 2, E. Hubble sur, 300 ft N No. 1. Fred Phillips et al, Wichita Falls, W. A. Marwitz 1, S 4, H&TC Ry sur, 2512 ft to N and 2494 ft to W line. Texhoma Oil & Ref. Co., Wichita Falls, D. L. Wolf 2, S. P. Ry sur, 150 ft to N and 810 ft to W line; C. L. Abercrombie 5, S. P. Ry sur, 150 ft to W and 1482 ft to S line; D. L. Wolf 6, Wm. Hutton sur, 450 ft to N and 150 ft to W line. Prairie Oil & Gas Co., Ranger, G. M. Boren 5, R. D. Newman sur, 150 ft to W and 627 ft to S line. Blair, Kell, Humphrey & Kruger, Kemp Kort, Wichita Falls, R. O. Prideaux 1, J. J. Hand sur, 150 ft to S and E lines. Staley & Wynne, Staley Bldg., Wichita Falls, Parrish 9, B 92, Amer. Trib. sur, 300 ft to N and 150 ft to E line. Jno. W. Hooser, Dallas, Miller 4, B 19, Amer. Trib. sur, 300 ft N No. 3; 5, same sur, 300 ft W No. 2. Woodburn Oil Corp., Magnolia Bldg., Dallas, L. F. Wilson A26, Amer. Trib. sur, 490 ft to W and 150 ft to S line. Magnolia Petroleum Co., Dallas, Cowden-Portwood 10, 1581 TE&L sur, 300 ft W No. 3; A. J. Lowe 21, B 2, I. Holman sur, 350 ft SE No. 6, Pandem Oil Corp. & M. M. Richards, Wichita Falls, Morrison-Smith Lumber Co. 1, B 12, Mergargel sur, center.

Atascosa County—Frontier Oil Co., San Antonio, S. J. Langley 10, J. Sharp sur 518; 11, same sur. Witherspoon Oil Co., San Antonio, R. A. Langley 9, J. Sharp sur 518, 600 ft N No. 4.

Austin County—Malloy-Knolle Oil Co., 323 Postoffice St., Galveston, C. F. Knolle 3, J. F. Pettus sur, 100 ft SW No. 2.

Brown County—E. L. Smith Oil Co., Mexia, L. V. Edington 1, S 142, R. G. Milliken sur, 1211 ft to N and 190 ft to E line. Halmack Oil Co., Amer. Exchange Nat. Bank Bldg., Dallas, J. Allgood 1, S 19, H. P. Brewster 200 ft to N and W lines. Charter Oil Co., Box 35, Brownwood, L. L. Childress 1, Almendaris sur, 175 ft to E and 550 to S line. Barbour Oil Co., First Nat. Bank Bldg., Houston, J. M. Prater 3, W. B. Travis sur, 150 ft to center of E line; W. A. Prater 7, Wm. Miller sur, 450 ft to N and 150 ft to E line; 8, same sur, S No. 7. Humble Oil & Ref. Co., Cisco, B. F. Dunn 4, J. Delgado sur, 150 ft to S and W lines. Texas Co., Cisco, B. F. Dunn 2, S 12, J. Delgado sur, 300 ft S No. 1; 3, same sur, 150 ft to N and 450 ft to E line. Landreth Prod. Corp., Breckenridge, J. R. Prather 1, S 146, W. L. Swan sur, S central. Superior Oil Prod. Co., Wichita Falls, J. M. Barnes 1, N. Hakkenberg sur No. 105, 2500 ft to E and 1295 ft to N line. Roth & Farout, Independence, Kans., I. J. Welch 1, G. S. Parks sur, 840 ft to W and 1460 ft to N line. Superior

Oil Prod. Co., Wichita Falls, R. W. Giddings 1, B 63, J. J. Clelland sur 1007 ft to W and 648 ft to N line.

Brewster County—Green Valley Oil Co., Alpine, J. P. Wilson 4, S 5, B 212 T&St.L. sur, 300 ft to N and E lines.

Bexar County — Associated Petroleum Co., Fort Worth, S. A. St. John 2, A. J. Avant sur, 491 ft S No. 1.

Bastrop County — Mahone & Wilford, 310 Caroline St., San Antonio, D. B. Dunks 1, J. Black sur, 150 ft to N and W lines.

Baylor County—W. J. Green, Wichita Falls, W. A. Cockrell 1, 2464 TE&L sur, 150 ft to S and W lines.

Brazoria County—Rycade Oil Corp., Humble Bldg., Houston, Wisdom 2, H. N. Cleveland sur, 1800 ft to N and 1500 ft to W line.

Callahan County—W. H. Marlow, Putnam, R. D. Williams 1, S 18, D&D Asy sur, 150 ft to S and W lines. A. C. McDonald, Box 345, Putnam, Lobban 21, 2995 TE&L sur, 300 ft W No. 20. Brannon & Murray, Box 696, Cisco, Diller 11, S 48, L. A. L. sur, 200 ft to E and 400 ft to S line. Cranfill & Reynolds, Box 607, Cisco, Leveridge 2, S 318, S. P. Ry sur, 800 ft to N and 150 ft to W line. M. D. Heist, Box 191, Putnam, I. Hughes 4, S 6, D&D Asy. sur, 300 ft. S No. 3. Clark, Harbin & Baldridge, Wichita Falls, J. C. Freeman 1, B 60, C.C.S.L. sur, 150 ft to N and W lines. L. M. Hadley, Baird, S. Diller 2, S 52, 600 ft to N and 450 ft to E line. West & Fee, First Nat. Bank Bldg., Cisco, J. S. Burnam 8, 2288 TE&L sur, 300 ft S No. 6. Frost, Sikes, Conner & McRae, Eastland, S. F. Ingram 1, S 18, Bayland Asy. sur, 150 ft to N and 450 ft to E line. Cisco Oil Co., Box 436, Morgan, L. H. Qualls 34, 2279 TE&L sur, 300 ft SE No. 19. Miller & Miller, Putnam, G. Anthony 8, S 1, D&D Asy. sur, 150 ft to N and E lines. Baird Oil Co., Box 301, Putnam, W. Warren 1A, 2039 TE&L sur, 300 ft S No. 1.

Coleman County—Shaw, Fox & Adams, Burkett, W. M. Key 4, A. Wickson sur, 300 ft S No. 1. Midvale Oil & Gas Co., Cisco, F. R. Sprawls 3, J. H. Johnson sur, 150 ft to N and 160 ft to W line. Dave Duncan et al, Cross Plains, J. P. Morris 5, A. Andrew No. 190 sur, 300 ft to W and 1650 ft to S line. Cranfill & Reynolds, Box 607, Cisco, Parsons 1, S 167 M. McCarty sur, 150 ft to N and 1200 ft to E line. Moore Prod. Co., Box 446, Coleman, M. Keeney 1, S 48 H. Pearson sur, 660 ft to N and W lines. Mid-Kansas Oil & Gas Co., Tulsa, Okla., J. C. Dibrell 1, S 265 J. W. Hicks sur, 2508 ft to N and E lines.

Crockett County—J. K. Hughes Dev. Co., Mexia, L. P. Powell 1, S 63 Blk BB, GC&SF Ry sur, 150 to S and E lines. Roxana Pet. Corp., Dallas, L. P. Powell 1, S 63 Blk BB EL&R Ry sur, 250 ft to N and W. lines. Humble Oil & Ref. Co., Houston, L. P. Powell 4, Blk BB-2 N. A. Miller sur, 285 ft to E and 2994 ft to S line; No. 5, 330 ft to E and 2407 ft to S line; No. 6, 285 ft to E and 3877 ft to S line; No. 7, 285 ft to E and 4288 fe to S line; L. P. Powell 8, Blk BB-3, W. D. Parker No. 2 sur, 250 ft to S and W lines. J. K. Hughes Dev. Co., Mexia, L. P. Powell 1, S 2 N. Miller sur, 250 ft to W and 150 ft to S line.

Caldwell County—Witherspoon Oil Co., San Antonio, M. L. Brewer 13, F. Castillo sur, 500 ft SW No. 8. Grayburg Oil Co., San Antonio, W. H. Tabor 13, N. Reaville sur, 350 ft W No. 11.

Clay County—Western Oil Corp. of Texas, Brown Bldg., Wichita Falls, Stine 1, B 16, P. C.S.L. sur, 150 ft to N and E lines.

Comanche County—H. J. Wood, Box 836, Cisco, B. Blakely 3, N. Berkeley B 21 sur, 500 ft W No. 2.

Cherokee County—Rico Petroleum Co., Reese, Lewis 1, J. Pinda sur, 700 ft to N and 150 ft to E line.

Eastland County—Magnolia Petroleum Co., Dallas, A. W. McMinn 8, B 1, M. Finch sur. W. E. Rice 2, M. Finch sur. Columbus Ram-

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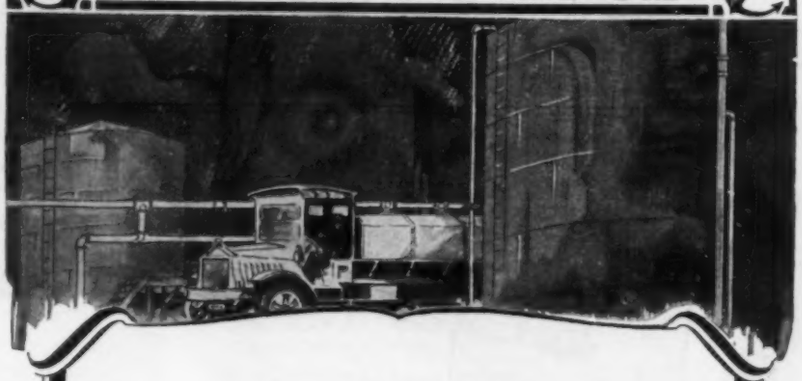

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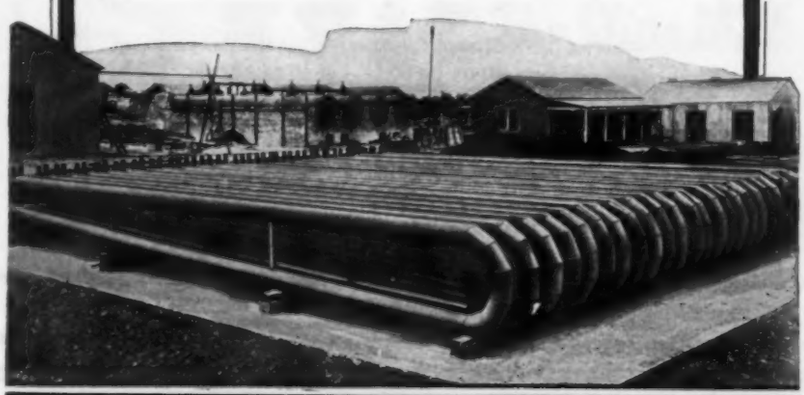

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sey, Box 248, Cisco, G. C. Daniels 1, S 2 sur, 750 ft to N and 450 ft to E line. Texas Co., Cisco, J. L. Noble 1, S 45 H&TC Ry sur, 330 ft to N and 920 ft to E line.

Fort Bend County—Gulf Production Co., Houston, R. J. Wheat 10, M. Young sur, 1225 ft to S and 700 ft to W line; T. W. Davis 28, M. Young sur, 750 ft SW No. 26; No. 29, 200 ft SE No. 15. J. H. P. Davis 10, H&TC Ry No. 101, NE corner. Rycade Oil Corp., Humble Bldg., Houston, D. Flessner 3, T. Allsberry sur, 1600 ft to W and 150 to S line.

Galveston County—Gulf Production Co., Houston, G. E. Smith 5, M. Dunman sur, 300 ft S No. 2. Sun Oil Co., Beaumont, E. K. Cade C 8, P. G. Biglin sur, 330 ft to N and 30 to E line.

Gonzales County—Sun Oil Co., Dallas, J. D. Nelson 2, T. Jackson sur, west central.

Gray County—H. H. Wilcox, Tulsa, Okla., W. Whorley 3, S 62 I&GN Ry sur, Blk 3, 330 ft to S and E lines.

Harrison County—State Line Oil & Gas Co., Ardis Bldg., Shreveport, La., Jones 1, W. R. Anderson sur, 2258 ft to N and 500 ft to W line.

Hutchinson County—Coble-Whittenburg Oil Co., Box 731, Amarillo, Whittenberg 1, S 12 B Y, M&C sur, 330 to N and W lines; No. 2, 330 to S & W lines; No. 3, 330 ft to N and E lines; No. 4, 330 ft to S and E lines. J. A. Swindler, Muskogee, Okla., E. Cockrell 1, S 8, B 3, D&SE sur, 250 ft to N and W lines. Phillips Petroleum Co., Bartlesville, Okla., W. T. Coble 4, S 12, B Y, M&C sur, 330 ft to N and 997 ft to W line; No. 5, 330 ft to N and W. lines. C. C. Patton 1, M. Whitlen sur, 330 ft to N and W lines. Roxana Petroleum Corp., South Bend, H. E. Smith B 2, S 11, B Y, M&C sur, 330 ft to E and 315 ft to N line. McMann Oil & Gas Co., Box 712, Tulsa, Okla., R. Wheatley 1, S 66, B Y, H&TC Ry, 330 ft to E and 280 ft to S line. Gulf Production Co., Ft. Worth, C. L. Dial 6, S1, B 1, H&GN Ry sur, 660 ft to N and 1890 ft to W line; No. 7, S 25, B 47, H&TC Ry sur, 660 ft to N and E lines; No. 8, S 1, B X02, H&OB sur, 660 ft to N and 1978 ft to E line; No. 9, S 34, B M23, TC Ry sur. Traveller's Oil Co., 311½ Polk St., Amarillo, W. L. Kingsland 2, S 6, B Y, M&C sur, 450 ft to E and 330 ft to S line. Canadian River Oil Co., Amarillo, W. L. Kingsland 3, S 4, B Y, 330 ft to N and W lines. Midwest Exploration Co., Amarillo, H. E. Smith 1, S 5, B Y, H&GN sur. 330 ft to S & E lines; No. 2, 330 ft to S and W lines.

Hardin County—Lake View Oil Co., Sour Lake, Hardin County Oil Co. 47, S. Jackson sur, 100 ft NW No. 38.

Jim Hogg County—K. & S. Corp., Laredo, R. Holbein 27, S 11, B 40, Las Animas sur, 150 ft to W and 210 ft to S line. M. E. Webber, Laredo, R. Holbein 1, S 15, Las Animas sur, 150 ft to N and W lines.

Jefferson County—Yount-Lee Oil Co., Beaumont, Gladys 3, J. A. Veatch sur, 610 ft to E and 1172 ft to S line. Gulf Production Co., Houston, I. R. Bordages 2, W. H. Smith sur, 625 ft N No. 1; Gladys 221, J. A. Veatch sur, south central part of blk 24.

Liberty County—Humble Oil & Ref. Co., Houston, Guedry 21, J. Devore sur, 240 ft E No. 5.

Live Oak County—H. Coquat, Three Rivers, W. H. Sartain 1, S 43, C. T. Simmons sur, 150 ft to N and 800 to W line. Houston Oil Co. of Texas, Houston, H. Cartwright 16, J. M. Colchado sur, 4800 ft SW No. 15.

La Salle County—De Lange-Eiser Dev. Co., Russell Bldg., Wichita Falls, Fee 1, No. 102, sur, 600 it to E and 1800 ft to S line.

Milam County—Elbert Williams, Corsicana, J. W. Roark 4, T. J. Chambers sur, 155 ft to S and E lines; No. 5, 300 ft to NW No. 4; No. 6, 300 ft NW No. 5; No. 7, 300 ft NW No. 6. Union Prod. Co., Box 338, Rockdale, J. Strelsky 2, Chambers sur, 600 ft SE No. 1.

Mitchell County—The California Co., Colorado, Texas, W. R. Womack 5, S 11, B 28, T&P Ry sur, 646 ft W No. 2.

McCulloch County—Bristol Oil Co., Fort Worth, M. Waddell 1, S 1051, J. H. Miche sur, 850 ft to E and 800 ft to S line. Kennedy &

White, Cisco, A. Pumphreys 1, 794 sur, 150 ft to S and E lines.

Montague County—Texas Co., Wichita Falls, J. B. Oldham 4, J. Chambliss sur, 471 ft W No. 3; J. W. Maddox 1, J. Chambliss sur, 250 ft to N and E lines.

Medina County—W. C. Jameson, Hondo, J. A. Mott 1, No. 1470 sur, 300 ft to N and 700 ft to E line.

Navarro County—De Arman Bros., Hardy-Peck Bldg., Corsicana, E. A. Eliot 1, M. Autry sur, 150 ft to S and W. lines. Sun Oil Co., Dallas, A. M. Swink 1 S, Wm. Hudson sur, 150 ft to center of E line.

Orange County—Gulf Production Co., Houston, K. Lang 9, Jas. Dyson sur, 250 ft N No. 8.

Pecos County—Western Dev. Co., First Nat. Bank Bldg., San Angelo, Jasper County Realty Co. 1, S 29, B 10, H&GN Ry sur, 150 ft to center of SW line. G. G. Miller, Fort Stockton, J. H. Downs 1, S 116, B 8, H&GN Ry sur, 150 ft to N and E lines.

Reagan County—Marland Oil Co., W. T. Waggoner Bldg., Ft. Worth, T. J. Cole 1, A. Roach sur, 286 ft to W and 1093 ft to S line.

Refugio County—Houston Oil Co. of Texas, Houston, F. B. Rooke 5, T. Mullen sur, 50 ft to N and 200 ft to E line; No. 6, 1550 ft S No. 4.

Shackelford County—Snyder & Moutray & Sons, Cisco, L. M. Griffith 6, S 37, L. A. L. sur, 450 ft to N and 300 ft to W. line. E. B. Cochran, Wichita Falls, S. S. Diller 1, S 42 L. A. L. sur, 450 ft to N and 550 ft to W line. J. B. Loftin, Cisco, Eubanks 6, 2039 TE&L sur, NW corner. Loofburrow-Chamness Oil Co., Moran, J. J. English 10, S 29, Univ. Lands sur, 660 ftto N and E lines. Hope Petroleum Co., Cisco, Wm. Poindexter 1, S 48, T&P Ry sur, 150 ft to N and E lines. Howland & Gallagher, Albany, J. B. Matthews 1, S 58, E. T. Ry sur, 660 ft to center of N line. Roeser & Pendleton, Inc., Fort Worth Club Bldg., Fort Worth, W. I. Cook 2A, S 85, E. T. Ry sur, 300 ft E No. 3 A; No. 3A, S 81, 150 ft to center of N line; No. 1A, S 84, 150 ft to center of S line; No. 4A, S 85 E. T. Ry sur, 150 ft to S and E. lines; No. 1 B, 150 ft to N and E lines. Loofburrow-Chamness Oil Co., Moran, J. J. English 10, S 29, Univ. Lands sur, 660 ft to N and E lines.

Stephens County—Texas Pacific Coal & Oil Co., Ranger, E. A. Hancock 1, S 85, T&P Ry sur, 330 ft to N and E lines; C. Binney 63, S 53, T&P Ry sur, 573 ft to E and 2377 ft to S line.

Sabine County—Crater Oil Co. of Texas, Burkeville, American Lumber Co. 1, L. B. Anthony sur, center.

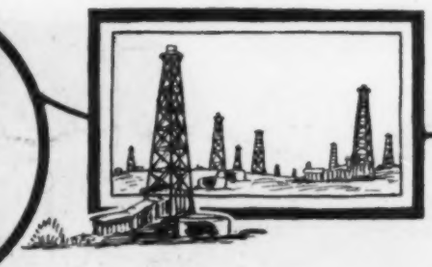
Sterling County — California Co., Colorado, J. T. Davis 1, S 288, B 2, H&TC Ry sur, 990 ft to S and E lines.

Travis County—Gulf Prod. Co., Houston, A. R. R. Parsons 1, G. C. Jennings sur, 650 ft to E and 150 ft to S line.

Throckmorton County — Murchison & Fain Oil Co., Waggoner Bldg., Wichita Falls, W. H. Portwood 2, J. D. Wilson sur, 1840 ft to E and 5180 ft to S line.

Upton County—Marland Oil Co., W. T. Waggoner Bldg., Fort Worth, Benton Land Co. 1, S 1, J. Prater sur, 330 ft to S and W lines.

Wichita County — C. E. Bailey, Waggoner Bldg., Wichita Falls, H. Willis 1, C. Winters sur, 150 ft to S and W lines. J. H. S. Bonner, Staley Bldg., Wichita Falls, A. J. Perkins 4, P. Corrigan sur, 350 ft to S and E lines. Humble Oil & Ref. Co., Wichita Falls, J. & J. Waggoner 1, S 8, GH&H Ry sur, 150 ft to N and E lines. Gulf Prod. Co., Fort Worth, J. L. Waggoner 1, M. A. Willis sur, 150 ft to N and W lines. Atlantic Oil Prod. Co., Magnolia Bldg., Dallas, W. T. Waggoner 1, S 14, H&TC Ry sur, 150 ft to N and W lines. Virginia Oil Ass'n, Box 344, Fort Worth, Burnett-Lloyd 21, J. F. Torrye sur, 600 ft NE No. 5. Ryan Consolidated Pet. Corp., Bartlesville, Okla., A. C. Henson 3, T. Cooke sur, 1570 ft to N and 1200 ft to W line; G. Nance 59, S. O. Fowler sur, 400 ft NW No. 11; 60, same sur, 315 ft S No. 54. National Pet. & Ref. Co., Staley Bldg., Wichita Falls, E. F. Gaston



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RESULTS

1, J. Rector sur, 150 ft to N and 20 ft to W line. Bullington, Lee & Pendleton, Wichita Falls, G. Jennings 15, S 12, HT&B Ry sur, 250 ft W No. 6. W. J. Moran, Box 1477, Wichita Falls, F. P. Warren 7, Kepler sur, 50 ft N No. 6. Hazlitt-Simmons Corp., W. T. Waggoner Bldg., Fort Worth, E. Bentley 9A, P. Corrigan sur, 400 ft to N and 275 ft to W line. A. D. Robinson, Kirby Bldg., Dallas, J. E. Roller 29, W. A. Grady sur, 50 ft N No. 2; 30, same sur, 200 ft N No. 29. Planet Pet. Co., Staley Bldg., Wichita Falls, S. B. Burnett 76, S. B. Burnett sur, E of No. 25. Magnolia Pet. Co., Dallas, S. L. C. Pratt 16, S 2, HT&B Ry sur, 300 ft S No. 13. Camp Oil & Gas Co., Harvey-Snyder Bldg., Wichita Falls, S. R. Munden 16, J. McCool sur, 150 ft to center of E line. G ayce Oil Co., Brown Bldg., Wichita Falls, A. L. Witcher 3, 821 TE&L sur, 300 ft E No. 1, 5, same sur 300 ft to S and E lines. W. E. Timblin, Wichita Falls, R. K. Callan 1, A. Brigham sur, 750 ft to N and E lines. United Prod. Co., City Nat. Bank Bldg., Wichita Falls, J. W. Snow 1, HT&B Ry No. 3 sur, 150 ft to center of N line. Texhoma Oil & Ref. Co., Wichita Falls, T. & J. Waggoner 1, H. George sur, 660 ft to S and W lines; L. P. Douglas 1A, S 11, HT&B Ry sur, 150 ft to N and W lines; J. & J. Waggoner 16, BS&F sur, 300 ft N No. 15; S. Mitchell 3, P. Castleman sur, 150 ft to N and E lines. D. M. Ross, Box 1464, Wichita Falls, S. Mitchell 12, P. Castleman sur, 300 ft E No. 6. Staley & Wynne, Staley Bldg., Wichita Falls, H. B. Hines 3, S 11, H&GN Ry sur, 300 ft N No. 2. Ryan Pet. Corp., Bartlesville, Okla., G. Nance 58, S. O. Fowler sur, 315 ft SW No. 56. King Pet. Co., Perkins-Snyder Bldg., Wichita Falls, Cole 5, J. McCool sur, 300 ft S No. 4. Skelly Oil Co., Tulsa, Okla., B. Ramming 5, HT&B Ry sur, 150 ft to S and W lines. Burleson & Chenault, Harvey-Snyder Bldg., Wichita Falls, Waggoner Bros. 1, M. A. Willis sur, 750 ft to W and 150 ft to S line. Humphrey-Merritt, Staley Bldg., Wichita Falls, C. T. Taylor 2, B 98 R. R. V. L. sur, 375 ft N No. 1. Drillers' Dev. Co., Electra, L. P. Douglas 8, Day Land & Cattle sur, 300 ft SW No. 1.

Wilbarger County—Waggoner Ref. Co., Box 107, Electra, W. T. Waggoner 1A, S 47, H&TC Ry sur, 200 ft to W and 150 ft to S line. Magnolia Pet. Co., Dallas, W. R. Piper 49, S 18, B 13, H&TC Ry sur, 600 ft W No. 47; F. Sumner 53, S 17, B 13, H&TC Ry sur, 600 ft NW No. 39. Humble Oil & Ref. Co., Wichita Falls, W. H. Stephens 46, S 83, H&TC Ry sur; W. T. Waggoner 5, S 47, H&TC Ry sur, 300 ft N No. 1; 6, same sur, 150 ft to N and E lines; W. T. Waggoner 4, S 46, H&TC Ry sur, 150 ft to S and E lines. Landreth Prod. Corp., Vernon, W. T. Waggoner 6, S 43, H&TC Ry sur, 655 ft to N and 20 ft to W line; W. T. Waggoner 1, S 44, H&TC Ry sur, 220 ft to S and E lines. Roxana Pet. Corp., South Bend, W. T. Waggoner 1, S 43, H&TC Ry sur, 220 ft to N and E lines; 7, same sur, 220 ft to S and W lines; 8, same sur, 660 ft to W and 220 ft to S lines. Murchison & Fain Oil Co., Wichita Falls, J. Streit 1, S 19, H&TC Ry sur, 150 ft to N and W lines.

Webb County—Geo. M. Ball Oil Co., Maverick Bldg., San Antonio, A. L. Edgington 5, B 74, Puig sur, 433 ft N No. 3; 6, same sur, 433 ft N No. 5, 7, same sur, 433 ft N No. 6. K & S Corp., Laredo, R. Holbein 28, S 11, B 6, Las Animas 150 ft to N and 210 ft to E line.

Wharton County—Sun Oil Co., Beaumont, A. E. Taylor 6, S. F. Austin sur, SW of No. 2, 11, same sur, SW of No. 4.

Young County—Atlantic Oil Prod. Co., Magnolia Bldg., Dallas, R. H. Rachuig 3, S 4, BBB&C Ry sur, 504 ft W No. 1. Gulf Prod. Co., Fort Worth, R. Campbell 5, 1452 TE&L sur, 300 ft S No. 1; E. B. Hanna 1, 80 TE&L sur, 1492 ft to N and 1780 ft to W line. Roy I. Carter, Wichita Falls, S. M. Bensen 3, 1450 TE&L sur, 300 ft S No. 2. Bridwell & Heydrick, Wichita Falls, W. R. Farmer 3, S 6, J. Anderson 150 ft to N and W lines. P. F. Gwynn, Harvey-Snyder Bldg., Wichita Falls, S. Powell 2, 1586 TE&L sur, 667 ft E No. 1.

The Paleontologist Says:

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To the big oil operator, "Paleontology" means a laboratory analysis of formations as shown by oil well cores. Of course he wants a 100% correct report and how can it be made without a 100% core? The paleontologist is not paid to guess; anyway he won't when it is so easy to get accurate cores.

The Phipps Core Bit is THE 100% tool that gives 100% cores. Your own crew can produce 100% cores with it. No highly skilled "coring experts" needed to operate it; not at all complicated. The scientific design insures a perfect core each time the "Phipps" is used; it works as simple as a fish tail. There is no more important tool in any rig, none so cheap, in point of results.

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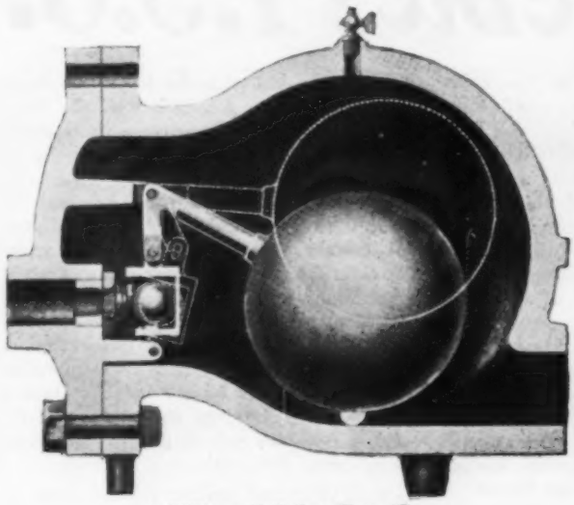


Williams Ball Seat Trap 4B

Ball Seat Steam Trap Is New Development

A ball seat steam trap actuated by a float, said to be an entirely new development in steam trap construction, is being manufactured and marketed by The Williams Gauge Company, Pittsburgh, Pa. The trap is known as the "Williams New Ball Seat Trap No. 4B."

The ball valve of this trap is held closed and leakless when the float is in the position shown in the accompanying cross-sectional photograph. The float is made of welded chrome nickel tested at 600 to 1200 pounds per square inch.

As the water in the chamber rises, the float rises also, but the trap does not open immediately. The designer purposely made an amply large cage for holding the ball so that there is about an eighth of an inch "lost motion" or "play" between the ball valve and its cage. Therefore the ball is held in place by the pressure in the trap body until the float rises to the position shown dotted. When the float is in that position the cage finally pulls the ball away from its seat.

As soon as the ball leaves its seat the pressure is equalized and the ball moves to the back of the cage, as shown in its dotted position, leaving the outlet wide open so that the discharge is quickly accomplished.

As the water discharges, the float then lowers again and when the water has reached a point three or four inches above the outlet the float is back to its initial position as shown in the photograph. This action of the float tips the cage forward to a point where the ball is caught by the water being discharged and the valve closes with a snap.

Once closed there is no possibility of leakage. Tightness is assured because the ball and seat fit accurately and both are made of Monel Metal. The ball and seat are removable and easily renewable. Every part is quickly accessible and although there is slight possibility that repairs need ever be made, the time and cost of such repairs would be a trifling matter.

Additional data will be furnished by the company upon application.

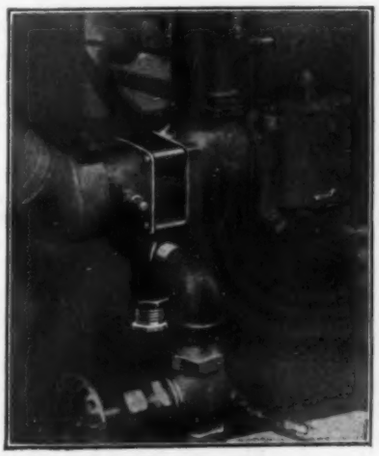
Simplicity of Adjustment Feature of Gas Mixing Valve

The Star Drilling Machine Company, Akron, Ohio, is announcing a new Star Natural Gas Mixing Valve, designed for multiple cylinder gasoline engines. Simple two-piece construction that insures maximum efficiency without requiring frequent adjustment is the feature of the valve.

It is easily installed and becomes a permanent part of the carburetor, permitting switching from one fuel to the other without stopping the engine to make adjustments.

The Star Valve is used with a low pressure regulator and operates efficiently on one and one-half ounces of pressure. Gas supply is controlled by a needle valve. This when once adjusted requires no further adjustment. The carburetor choke valve regulates the air feed. Engine speed is controlled by a regular carburetor throttle lever.

The valve can be used on nearly all multi-cylinder engines in general use in the oil and gas fields. Further information will be supplied by the company on request.



Star Gas Mixing Valve

D. & B. Pump Locates New Store at Santa Fe Springs

Los Angeles.—With the completion of a fully equipped store at Santa Fe Springs, the D. & B. Pump and Supply Company of Los Angeles, and Dallas, is now in a position to give D plus B "Quality First" service to oil men throughout the southeastern portion of the Los Angeles basin, and through the Montebello and Santa Fe Springs fields.

The new store will be managed by Glenn Henderson and will carry an adequate stock of pumps, sucker rods and all types of fittings used in the fields.

The store is modern to the most minute detail and is equipped with all devices for saving both the dealer's and the purchaser's time. Sucker rods are handled with an overhead crane, facilitating their loading or unloading as the case may be. With this method of loading rods, it is not necessary for a swamper to accompany the truck driver, the whole operation being handled by one man, together with the store keeper.

This building is the first of a new type which has been designed by the D. & B. Engineering department, and will be built in units in the future. The type of construction allows duplication in all stores which the concern may build, and in fact the building itself could be removed if necessary, to another location.

Climax Appoints Distributor

Climax Engineering Company, Clinton, Iowa, announce the appointment of Rapp-Huckins Company, Inc., 59 Haverhill Street, Boston, Massachusetts, as district representatives for the sale of Climax Industrial Power Houses and Engines.

The Rapp-Huckins Company are an old and well-established firm. During the past twenty-five years, they have handled marine and industrial engines. They maintain a show room, as well as a first-class service station, and are looked upon as leaders in the sale of engines in Boston and vicinity.

M. & V. Opens at Panhandle

Wichita Falls, Texas.—The M. & V. Tank Company has established a complete stock of welded, bolted and wooden flow tanks and gun barrels at Panhandle, Texas, to serve producers in Carson, Hutchinson and other oil producing counties in the Texas Panhandle, according to J. L. Pope, sales manager.

LETTERS OF Paul Peebles P.S.G.

mi deer cleopatry

cleo hunny us prominent oil men in huston giv a banket up 2 Mrs. Rice's bordin house last Thursday whitch I wood hav asted yu 2 cum up 2 only it was not no ladies there escept them whitch was waitin on the tabbles & even them I giv a tip 2 the mater dhotle 2 run out when Ray dudley gotten up & started 2 tellin sum joaks whitch I had tole him, only he did kinder tune them down a little when he looked over & seen how pius Mr. commishuner smith was lookin. so that is the reesen hunny that I did not ast yu 2 cum up for the meetin. but ennyway I will tell yu all about it just like it happens so yu will git all the bennefits of the banket escept the eats whitch was not mutch & I wood hav had 2 take yu 2 a resterant afterwards 2 git yore appertite sattisfied even if yu had bin there.

well 2 start off with sumboddy sed we ort 2 hav a meetin in huston for the rr commishun whitch is the conversashun committy in texas. I do not no all of the detales about what we want out of them, but I gess that will cum out latter, but as it is now we just want 2 be frends with the boys. well I was appointed a speshul committy at the last minnit 2 find all the invited gests & show them where the banket was bein held & also giv them tickits sos that they cood git in, & also bill farish whitch had lost his tickit & he had 2 git in on account of he was goin 2 make a speach.

well like I sed, ray Dudley was the toast master but it did not nobody need no help 2 master the toast whitch they had at this banket because it was just a half a piece sos not 2 make the chicken whitch was over it look 2 little, because like it was yu pretty near needed a palentologist 2 tell yu what it was.

When me & major townes whitch is a humble lawyer (if there is sutch a thing) was roundin up the comishunners & the deppyty supervisers in the lobby in the hotel I seen they was kinder pollytickin around & lookin a little werried, so when I went back up & seen bill farish I told him in his speach he had better giv them sum of the figgers whitch I put in that book whitch I ritten for the api on how long will oil last, so he did & that kinder cheered up the boys a little.

what I meen it cheered them up is that the rale rode comishun in Texas is a kinder of a pekular organizashun. they uster be the bosses of the ralerodes till congress sed that uncle sam was runnin that part, so here we had a buntch of fellers whitch had bin elected 2 offis & had a lot of frends 2 vote for them, whitch had there jobs kinder slippin out from under them. of course hunny a state offiser does not care mutch about havin enny job, but they do want sum kind of a excuse.

so 2 giv them a new excuse well the legislashure made them be the conversashun commishun whitch was handy 2 do on account of they cood make a new job by law that way insted of havin to amend the constitushun & amendin the constitushun is gittin kinder unpoplar sinct the 18th amendment.

along about the same time sumboddy thort it ort 2 be sum deppety supervisers, so they made a law for that, but the sheriffs did not like 2 hav noboddy but they ownselfs supervisin there deppetys, espeshul them whitch was just depptys sos they cood carry a gun & wood vote rite, so they had a lot of deppty superviser jobs with salleries & everything, sos they just terned them over to the rr comishun, & that is how cum it is like it is now.

but the reesen I asted bill farish 2 tell them about how mutch oil it is is that I cood sea they was gittin werried aboutt he oil supply runnin out pretty soon on account of rummers they had herd, & like I thort, when Bill had rattled off them billyun figgers they cood sea that it wood be need for oil conversashun for a long time & they gotten so happy lookin that I was beginnin 2 wonder if they was servin sumthin at the hed tabble whitch the rest of us was not gittin.

so after bill gotten threw Mr. Clarence gilmore gotten up & spoak 2 the boys about how the rr commishun cum about & how happy they was 2 hav 2 werk with the oil feeld boys & just pitched out bokays till yu cood not tell hardly if he was runnin for reeleckshun or wood run for the senate or sumthin. he cums from van zandt county & was under a kinder of a handicap when he started in the oil conversashun bizness because up in his county the oil situashun is upside down on account of the salt bein on top. Then Mr. comishuner terrel gotten up 2 show some of his qualificashuns for a conversashun comisuner & gotten away with it pretty good, & then lon Smith, only when he rose up & put his finugers 2gether in front of him I started 2 git up 2 because he looked like he wanted us 2 all git up & sing the doxology, but he did not do it, because there was still sum moar 2 cum.

then after him cum judge bell whitch is the werkin end of the oil department up 2 austin, but of corse he had 2 show his claim 2 bein a member of the conversashun commishun, even if he does hav 2 keep track of the paper. he is a pretty good speeker, hunny & a man of rare discriminashun on account of he sed that he had lerned a lot about oil conversashun & korreck oil feeld practis from reedin the rintins of Paul Peebles hisself. now I gess yu no hunny why the oil bizness runs so smooth in this staet & why the university is gittin ritch from oil & why evryboddy in the bizness is happy in this state—because the cheef of the oil & gas divishun noes his onions because he reeds what cums from mi pen.

well they had parker the gas man & jack morehouse & lomax & lauter & pierson & humes and earl Calloway there also, but they did not giv no samples of their conversashun & the last speeker was cook wilson from bomont & he made a pretty good speach because he did not say nuthin. I gess the reesen the deppyty supervisers did not talk none is that part of the organizashun does the conversatin & sum of them hav 2 werk, like forinstants goin up on the derrick floor & astin how deep are yu & foaming up 2 ast if yu plugged that hole when yu quit.

while they was all hear & I cood sea them personal I tooken up with them about a job hear in huston. it is rumered that they are goin 2 mabe hav natral gas hear sumtimes & I am astin for the job reglatin the pilot lites in automatick watter heeters whitch is a grate waste of the nartal resorces of the state if they are allowed 2 be a 1/64 of a inch 2 high. I do not no if I will git the job or not, but I showed them mi pole tax reseet & this is eleckshun yere.

well hunny I will close & if yu do not sea me in goose creek next satterday yu will no that eether I hav went 2 the geeology meetin in dallis or sumthin elst has cum up whitch I can not come 2 sea yu.

yore lovvin paul.

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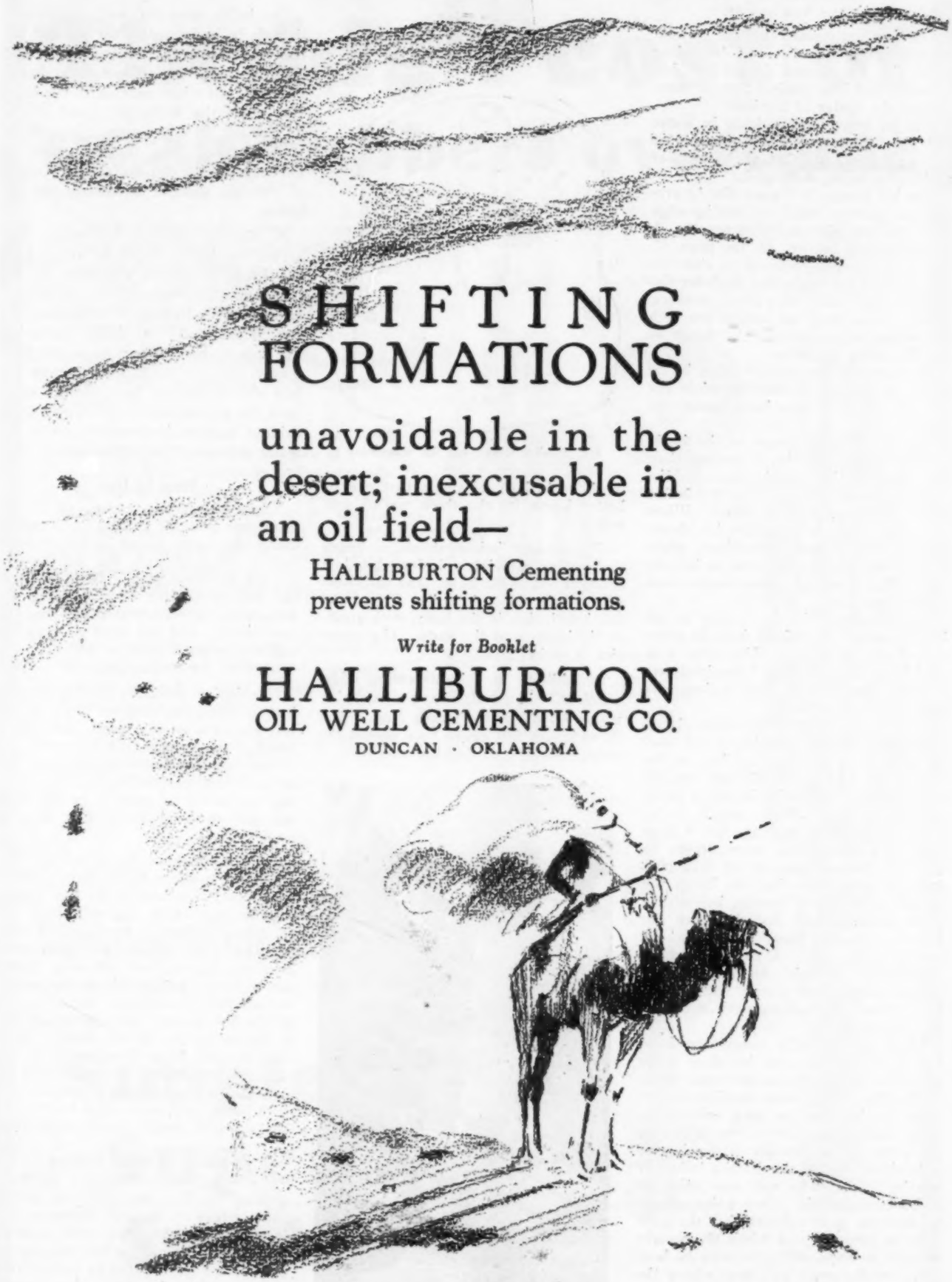

SHIFTING FORMATIONS

unavoidable in the desert; inexcusable in an oil field—

HALLIBURTON Cementing prevents shifting formations.

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OIL WELL CEMENTING CO.
DUNCAN · OKLAHOMA

There Are No Unimportant Details About Fishtail Bits

(Continued from page 34)

are thrown out toward the wall by centrifugal force, the distance depending upon the speed and length of bit. Hence, short bits project the jet more toward the center of the hole.

The jet loses force quickly in water and short bits therefore are used for drilling formations that stick together again after being dislodged.

The bit shown in Figure No. 12 presents a greater length of cutting edge than the one shown inFigures No. 3, opposite and figure 22 on page 77, hence the weight required to sink the longer edge bit is greater than for the shorter edge, for, with a given pressure, or wieght of pipe, the weight per inch of cutting edge controls the depth of cut that may be taken.

In practice, the curved edge bit is found to dig soft formations while the straight edged bit digs hard formations best.

The slope angle given to the blade on the curved edge bit is greater than the angle on the straight edge, for the reason that hard formations dig better when the slope angle is small. When the slope angle is large, the bit cleans itself better in soft formations, while hard formations do not tend to ball up so readily, and the slope angle need not be so great.

The V placed in the center of all blades assists in making hole in some way that is not clear. The same V is used in drills for drilling holes in stone; without the V, the drill makes less progress than with it.

When a keen edged bit is first placed on bottom, it makes a heavy cut, and the weight let down is less, but, as the edge dulls, and grows thicker, weight required to sink the bit becomes gradually more until all the weight is let down, with a thick cutting edge. A keen edge will usually dig more deeply so that the torque capacity of drill pipe will not permit turning the bit if the weight is let down heavily, but with a thick cutting edge, that does not dig heavily, the bit turns easily without stressing the pipe. A thick edged bit will revolve smoothly on bottom, even in formations that appear soft with a keen edged bit, making such a formation appear hard.

With strong, rigid connection from bit to drill pipe, the bit digs more smoothly in all formations; the short drill collar allows more bending directly at the bit; but the long drill collar, with thick wall, relieves the drill pipe of stress when the bit is digging at a boulder on one side of the hole. If the bit is set down with one point on a boulder and the other point up off of bottom, it is evident that the drill pipe is stressed, and when the weight of pipe is large, drill pipe may be bent over to the well wall but where the drill collar is long, not less than eight feet, for 9-inch hole, and still longer in larger hole, the pipe above is relieved materially of stress that can be better borne by the thick walled drill collar.

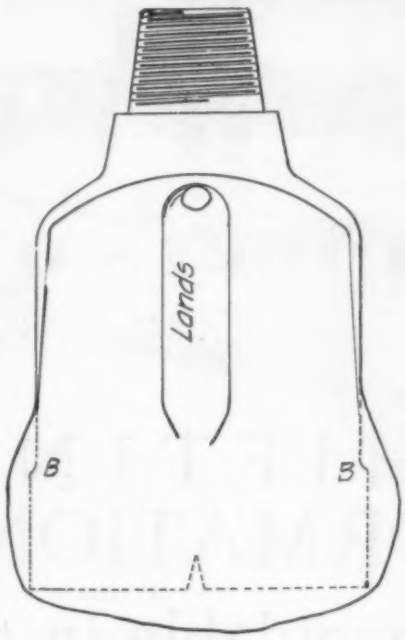

Fig. 3.—Bit forged out for sharpening

The picture below shows a heavy drill collar carrying a 15-inch bit, just brought out of the hole. The thickness of stock in this drill collar is one and one-half inches in the body, with greater thicknesses at the ends. The material is nickel steel.

In addition to a hard cutting edge, a fish tail should also have a hard side up as far as B in Figures Nos. 3 and 22 to insure full gauge hole should the point wear, preventing the necessity of reaming the next full gauged bit to bottom.

The balde need not, and should not, though, be immersed to the point B for the hardness extends too high and brittleness due to hardening may break the blade off when running in the hole. But when the blade is placed in the quenching bath, a pumped stream of coolant from B to the bath sets up hardness locally on the gauging edges of the bit, without hardening the interior.

A sharply defined hardening line across the blade should be avoided. If the blade is moved vertically in the bath from three-quarters of an inch to an inch and a half while hardening, the line is diffused. A sharp hardening line sets up hardening strains and steel may crack, for the thinner section below the hardening line shrinks more than the section above which places the thinner section in tension across the blade at an angle with the cutting edge.

Heat in Use

There are certain classes of formations that heat the cutting edge, particularly the outer edges in larger sized holes. Even though the bit be immersed completely in a bath of slush, the heat generated by dislodging the formation, or tearing it off of bottom, continually, and the heat of abrasion can rise to such point as will draw the temper of the cutting edge.

Convincing evidence of this may be had by using the hardness tester on the bit just above the edge, say three-quarters of an inch just before the bit is run and then immediately after running. Colors imparted to steel by drawing are removed quickly by abrasion, for this color is but a thin skim of oxide.

In a number of fields, where thick layers of medium hard shale predominate, such formations do not require mixing into slush, but will flush out in fragments and, as noted in the pages of The OIL WEEKLY previously, these formations are best dug with a heavy feed. And, as the pump usually cannot flush this kind of formation out of the hole as fast as the bit can loosen it, the rotary can be run slowly. Some fast records have been made in this class of formation, 500 to 900 feet per day being an ordinary performance with heavy drill pipe and a heavy drilling rig with ample power and steam.

Needs of Deep Drilling

As wells are continually driven to greater depths, the cost of placing sharp edges on bottom increases. This increase is not in direct ratio to depth, but in a greater ratio for long strings of pipe are not hoisted as fast as short strings, with the same draw works, engine and boilers, on account of greater weight, and fuel consumption is

The high cost of swab rubbers overcome

The necessity of frequently replacing ordinary swab rubbers coupled with the fact that the cost of rubber has vastly increased has made it absolutely necessary for oil well operators to seek new ways and means of lowering operating costs.

With the introduction of the Simplex Super Swab the expense of rubber takes a radical drop.

Actual performance records prove that the single rubber in the Simplex is far superior to three rubbers in ordinary swabs. The Simplex rubber positively cannot freeze or tear out because of its superior construction. It is fabricated with flake graphite, making it self-lubricating and it is scientifically reinforced so that a full, even closure is effected on the entire outer surface of the rubber.

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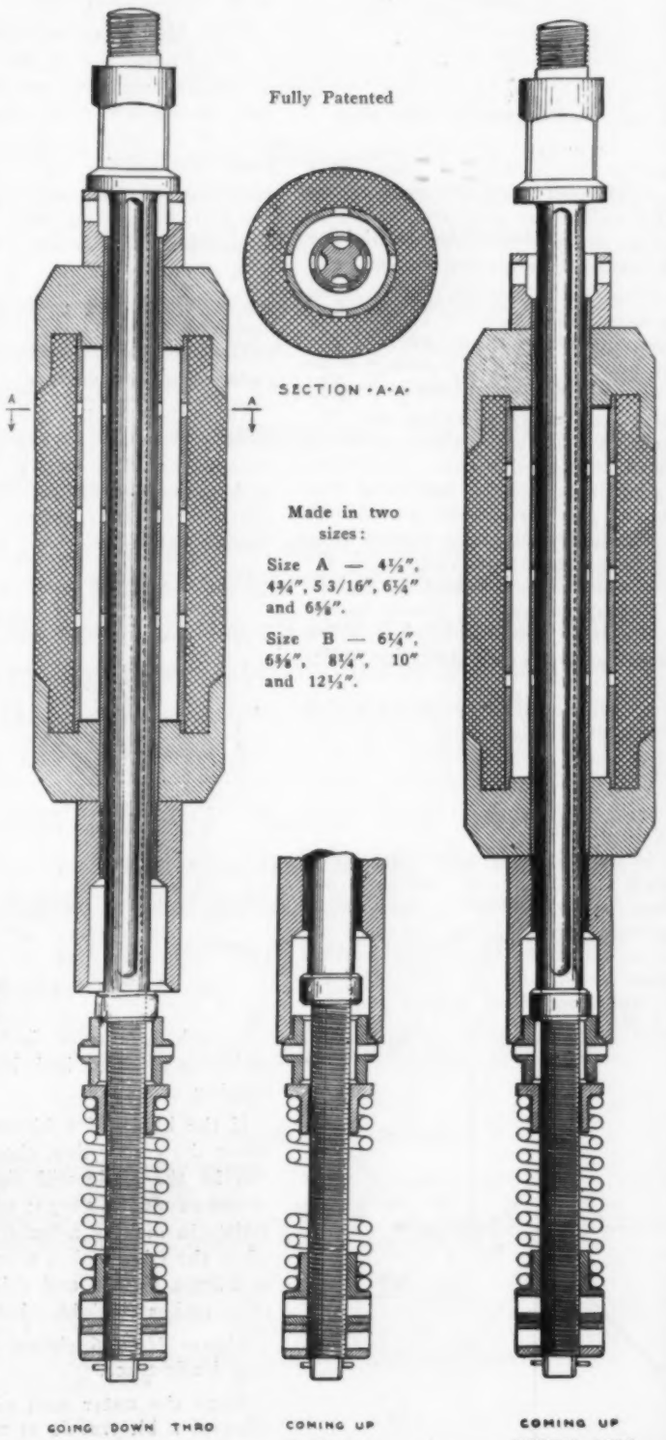
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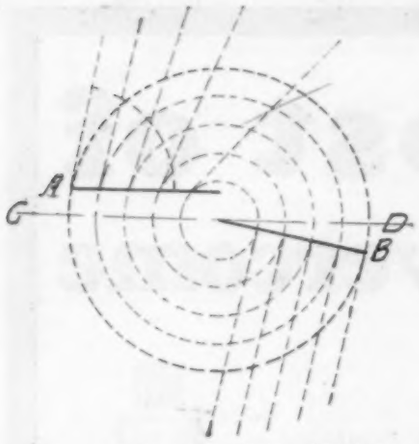

Fig. 13.—Trace of offset and radial edges

greater at these depths, also. Pipe from 4,000 feet to 3,000 feet is not handled as fast as pipe from 3,000 to 2,000; the number of lines required for depth makes a round trip slower.

And the depths of wells now, to make them commercial, calls for far reaching improvement in cutting edges. The writer believes that the industry is on the verge of such improvement.

There are many districts that are difficult to drill with rotary tools or standard tools, due to formations changing from soft to hard and vice versa; the soft formations are difficult with standard tools and require more casing and the hard difficult with the rotary, and with standard tools, the soft formations require more casing. And the hard formations change too frequently, or are too soft for roller bits.

In this class of territory, the adoption of a durable cutting edge on fish tail bits, especially on deep holes, will make such districts commercially exploitable from sands that would not otherwise prove profitable.

It is evident that when the bit is rotating in the hole, cuttings are thrown to the outside of the hole by centrifugal force. When cuttings are large, as in shale, they travel farther for this reason and are broken by the blade sweeping them around the well wall. That this occurs may be seen

Fig. 14.—Successive blade positions in one revolution

from the reduction in gauge of the gauging edge when sandstone or flint, or any hard, abrasive formation that dislodges in fragments are drilled, while in non-abrasive formations, that is formations not as abrasive as the former, bits do not lose gauge so readily.

The blade trace, or the impression that the cutting edge makes when set vertically on a surface, controls the cutting and self cleaning qualities of a bit to some extent also.

If the blade trace is radial, as shown at B in Figure No. 13, the cutting edge is always travelling around the hole with the edge at right angle to a tangent of a circle at any point on the blade, while, if the blade trace is offset as shown at A paralleling the center line CD, the cutting edge sweeps in a razor effect, digging and shaving rather than simply digging. In Figure No. 14 is shown the blade in successive positions around one revolution. The distance OD may be termed the offset distance for convenience.

To secure greater slope angle, the offset distance is usually increased, although the blade above may be bent back to avoid excessive offset distance. Offset distance required ranges from

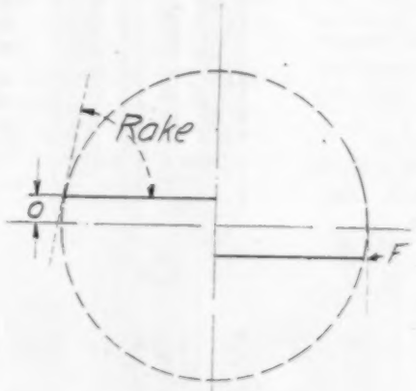

Fig. 15.—Parallel offset blade trace

one inch in a nine inch bit to two inches in a fifteen inch bit, for smooth digging.

If the blade of a bit makes a trace along the center line, shown in Figure No. 14, the blade will dig a hole that is not round to gauge; offset distance assists in making a truly circular hole, when the edge makes a trace as shown in Figure No. 15 and this same blade trace makes straighter hole.

Figure No. 16 shows a more current blade trace.

Since the outer part of the cutting edge of a bit travels at a greater rate of speed per revolution than other sections of the cutting edge, the badly used blade wears as shown in figure

Fig. 16.—Current blade trace

No. 17, and attempts have been made to secure more even wear equalizing the length of cutting edge to the speed.

With a blade trace shown in Figure No. 18 the length of blade between A and B has a length relative to cutting speed, and also the length between B and C is relative to the cutting speed.

In an eleven inch bit, the cutting speeds at 100 revolutions per minute are as follows:

At the 11-inch diameter 288 feet per minute.

At the 9-inch diameter 235 feet per minute.

At the 7-inch diameter 183 feet per minute.

At the 5-inch diameter 131 feet per minute.

And a blade form of this type is proportioned by fixing a relative length of blade and joining two points on the circles A and B between the points A and B, and so on through B, C, while the inner part C and D to the inner end of this half of the blade are simply curved in to dig out the center of the hole.

While this form of blade is somewhat difficult to make, the writer believes that with the deep holes and deeper holes being drilled, a blade trace of this type will be found economical. The application of welded on cutting alloys to a finished blade obviates the

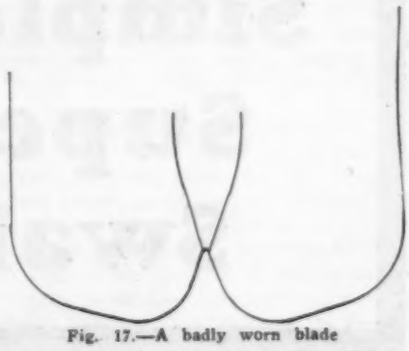

Fig. 17.—A badly worn blade

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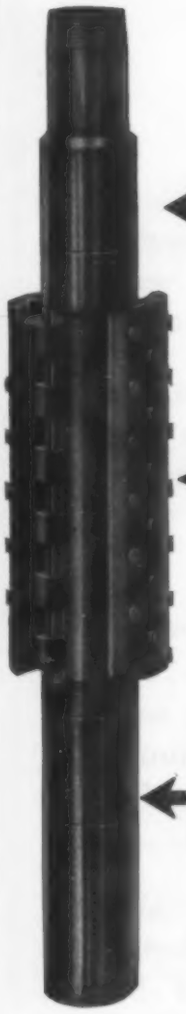
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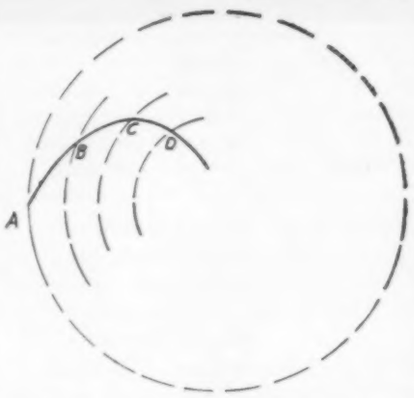

Figure 18. Trace of a blade form that cuts smoothly.

necessity of re-forging, for the blade can be built up again with a sharp cutting edge to this form each time after the blade is run.

The length of blade in this type is greater than in the usual type and, in deep holes, ample weight is above the bit to place the required weight per inch of blade length on it.

Different Formations

Figure No. 19 shows one side of a fish tail bit blade, with angles designated. The important angle is the slope, S, which can be fixed to maximum cutting effect, speeds and feeds, for various classes of formations. Hard formations call for a small angle of slope, medium formations for larger angle and soft formations still larger slope angle, since the object of slope is to set up a self cleaning effect to the cutting edge of a bit, sticky and gummy formations call for more slope than brittle formations. Of course, a bit cannot be changed every time a formation changes, but different fields present different predominating formations, and the slope angle may be adjusted to the predominating class of digging. For instance, the Gulf Coast, with its thick gumbo strata would call for a greater slope angle than formations of Wichita County, with its predominating brittle formations that are relatively harder.

And, where there are sections of hole presenting a distinct class of digging, bits may be dressed for that part of the hole, and changed when the digging characteristics change.

The included angle, X, controls the blade thickness. For soft formations this angle may be made small, for stresses of drilling are less than for hard formations, while for the latter class of digging, where torsion and shock are greater, the included angle must be made larger to provide strength to the blade.

In thick blades, the clearance angle, C, becomes small, though, destroying

Figure 20. A keen edged blade.

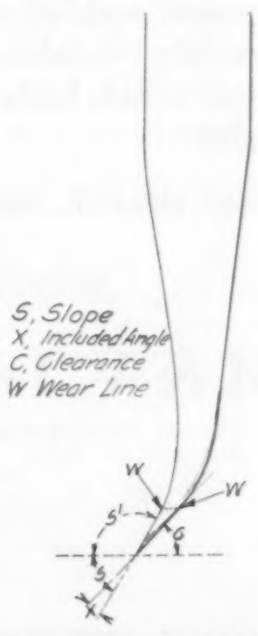

Figure 19. Designation of Blade Angles.

the keenness of edge. After considerable observation, the writer believes that harder formations, like hard, sandy shale, packed sands, and the like, without boulders, can be dug best with keen edged bits running at high speed with a light cut—a lighter cut being necessarily taken with a keen edge to prevent it breaking off; that gumbo and clay can be best dug with keen edges and that boulders must have a thick edge, or a large included angle.

When a blade is sharpened as shown in the Figure 20, it can have a wear up the blade of one inch to W-W before the blade is three eighths thick on the edge, while the thick edged bit of Figure No. 21 can wear but three-eighths of an inch when the blade is three-eighths of an inch thick as shown at A-B. And, when a blade is three-eighths of an inch thick on its point, it has lost its cutting edge, makes insufficient hole to justify running it further, and should be replaced with a sharp blade.

When run too long in the hole a

Figure 21. This blade is almost dull when run into the hole.

bit loses gauge, however, and to provide against this, the gauging edge,G-E, of Figure No. 22 should be run higher up the blade when a keen edge is used. The gauging edge normally averages three inches; in a keen edged bit the gauging edge can be profitably run six inches up the blade, or the bit will lose gauge before losing its edge.

Heating and Hardness

When the hole balls up, the point and edge of the bit digs in dry formation, because the accumulation of gumbo in the hole prevents water from touching the point and edge. It is not so difficult to heat up a blade digging in dry formation, even at very slow speed because of the weight placed on the bit; we know that a core barrel can be fused at low rotative speed when there is no water circulation close to the cutting edge; we know that in machine tool work, even though a flood of coolant may be pouring over the cut-

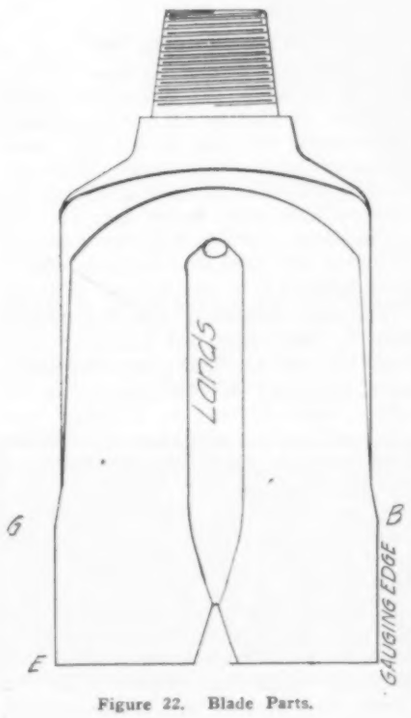

Figure 22. Blade Parts.

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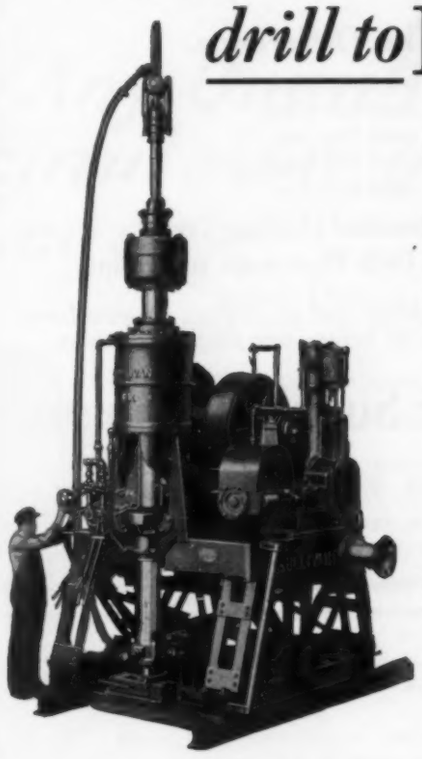

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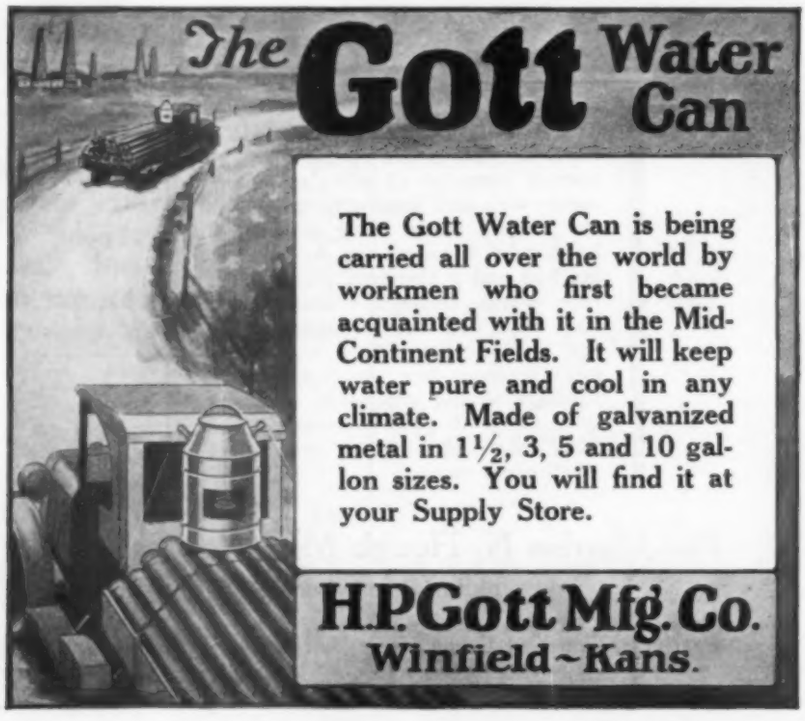
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ting edge and the chip, the cutting edge heats and may be fused. In carbon steel, temperature of 450 F. will effectively draw the temper of the edge, and when its hardness is gone, a few turns grinds off the edge.

There can be no argument about whether a bit heats or not; bits positively do heat, beginning when they touch bottom, and begin to turn, and if water can reach the cutting edge, heat is taken away, while if water cannot reach the cutting edge heat quickly accumulates until the hardness of carbon steel is all gone.

Not one bit in five hundred will show by color that the temper has been drawn—straw, purple and blue draw—and quite naturally for a sharp cutting edge is required to dig into a formation and the bit must be dug in before it will heat. And the bit then still possesses its edge and can be run longer, before grinding the edge off, taking away the color of tempering. The straw, purple and blue of tempering steel is not a permanent color to steel, but is a very thin skin of oxide that can be removed by abrasion very readily, so that, in the hole, color is wiped off in a few revolutions.

When the hole balls up, the point of the bit digs in dry formation where water cannot reach close and cool it; digging deeply into shale places the cutting edge in dry formation without water and, although these formations should not dull a bit easily, still when a bit loses its hardness, its edge goes quickly.

One reason that fast rotation makes more hole in gumbo is that, to rotate fast, the hole must be clear and clean, when the bit is cooled and remains hard.

Cost of Changing Bits

In a previous paper on steel in The OIL WEEKLY, the writer computed the cost of placing each cutting edge on bottom, but this is not the most important phase of a cutting edge, especially as concerning a drilling contractor, who must make hole to stay in business, for during the time of changing bits, time that might be otherwise profitable is lost beyond retrieve.

The rate of drilling hole per minute may be high when the bit is on bottom, but the bit might not stay there very long, on account of losing its edge, when it must be replaced, and the true measure of drilling speed is the time elapsed, which includes the time out for changing bits.

It is a maxim in contract drilling that profit on a hole must be made during the first half of the hole for the lower half usually nets a loss. If the same time were required for changing bits throughout the hole, the cost would be uniform down the hole, but, as the hole deepens, round trips require more and more time because the length of pipe

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to be withdrawn constantly increases. With the same drilling rig, 2000 feet of drill pipe weighing 32,000 pounds can be hoisted faster than 4000 feet of pipe weighing 64,000 pounds, for the same power only is available for both lengths of string and the hoisting speed of the pipe corresponds to the amount of power available on the rig. When the hole is started, three lines may be used for hoisting and, as the hole is deepened, more lines must be added to lift the pipe, which further increases the time of making a round trip to change bits. In a deep hole six, seven and even more lines may be strung up in the derrick, and, as the hoisting line speed and load capacity is practically a constant in the two ratios of a chain driven rig, each line added decreases the hoisting speed of the string of pipe just that much. With three lines and a line speed of 296 feet per minute, in high, three lines decreases the hoisting speed of the load to 98 feet per minute, while six lines makes a hoisting speed of 46 feet per minute; in low, three lines gives a hoisting speed of load of 60 feet per minute and six lines, 30 feet per minute, so that as the hole deepens, the pipe is lifted out more slowly.

Breaking out and screwing up are no slower, but long strings of pipe are lowered into the hole more carefully than short strings, making the time of going back into the hole with a long string greater proportionately than with a short string.

Of course, as lines are added, the winding drum diameter increases, adding some to speed of the line and load but, as the draw works must lift the load at any point up in the derrick, the lines must be regulated to the drum winding diameter also.

Fuel costs increase with depth of hole for these reasons also, and additional fuel is required to add pressure to the mud fluid with depth, for with depth, pump pressure increases, and more steam is required.

Formations also tend to harden with depth, too, making round trips more frequent in fish tail drilling, or in any kind of drilling.

Therefore, as a general proposition, a direct comparison of the value of good and mediocre should be made at the same depths.

The time of making a round trip at 1000 feet may be taken at one and one-half hours, with good, fast equipment; at 2000 feet, two and one-half hours; at 3000 feet, four hours; at 4000 feet, six hours, and at 5000 feet, nine hours, counting the time of lifting bit off bottom to setting another back on bottom.

In a hole 4000 feet deep, for instance, the last 2000 feet of pipe is hoisted with, say, six lines, but when the hole is 2000 feet deep, perhaps only four lines would have been used. The fast and slow clutch affords a higher line speed or lower, and the effect of more lines may be offset somewhat with these different ratios and corresponding line speeds.

The value of a bit, rather than the cost, then is the truer measurement of the durable cutting edge compared to an ordinary cutting edge.

On a footage contract basis, taking a true instance, with hole at $4.00, depth at 2000, forty feet per bit using the compromise steel, running one hour per bit. The rate of making hole then was 40 feet in three hours, or thirteen and one-third feet per hour, with an earning of $53.32. Another bit, with an exceptionally good steel, correctly forged, normalized and hardened, ran for two and one-half hours, making 138 feet of hole, or at the rate of 30.6 feet per hour, and this bit earned $552.00. At a rig operating cost of $4.00 per hour, exclusive of fuel, water, derrick, casing, transportation and erection, the poor bit netted $41.32 while the good bit netted $532.00, and the good bit therefore had a value of $490.68 more than the poor bit.

The writer has accurate records of far better performances than this, however, in good bits that made from six to nine times as much hole, running immediately after poor bits, and the reader may make other comparisons in deeper holes, finding that the value of a good bit increases materially with depth. Whether the formation is hard or soft, the same comparisons may be made; these are not imaginary values placed on bits, but are actual results obtained on the derrick floor, with daily drilling reports, by the same drillers, showing the same. In one case, the driller removed the bit being run after it had made five times as much hole, for even though the bit was still going, he thought that it had lost gauge and would set up a reaming job, but the same bit was immediately run back for it was still in good condition.

A sharp bit leads one to believe formations have softened up and a sustained sharpness is more apt to set up this belief, but cores show definitely whether formations have softened up or not.

Of course, a heavy, powerful drilling rig is used for deep holes to secure speed in handling pipe. To simply turn a rotary requires but little power, especially when small pipe is used in a small diameter deep hole, consequently the larger engines, and the twin engines of today have been adopted, with heavier line and drum shafts, heavier chains, larger drilling lines are required for handling pipe and not for actual turning of the rotary.

These large rigs are expenxsive to purchase, transport, maintain and operate, and to see a large rig of this kind in operation, embodying the best American practice, sets up a feeling of pride at accomplishments of America. But then, to see a poor bit steel nullifying all these efforts at rig design, manufacture and operation, reverses this feeling.

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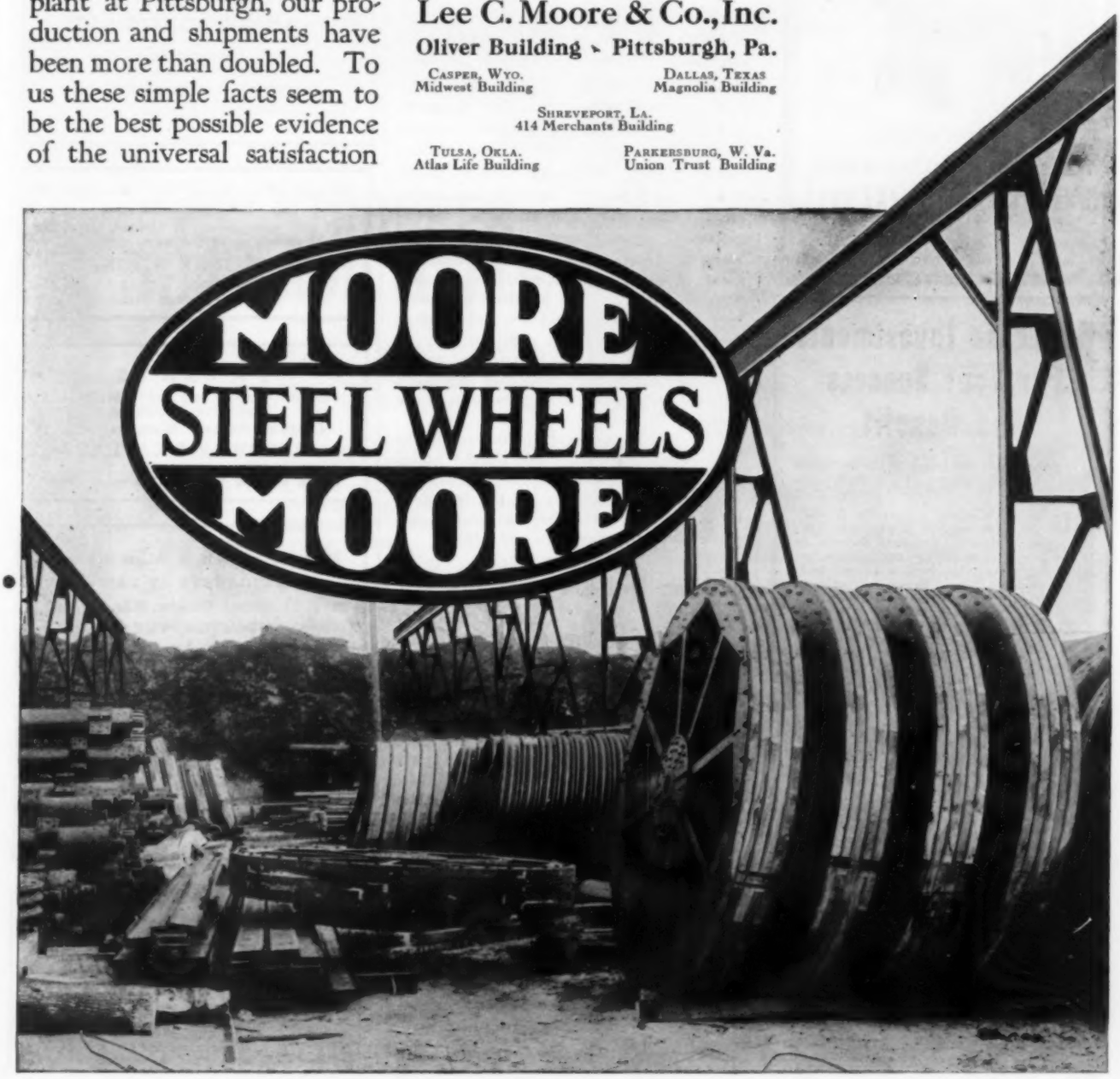

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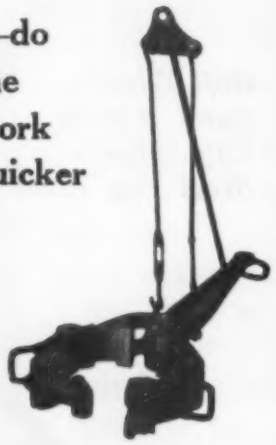

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The WHITWORTH THREAD sucker rod pin has been proven in 28 engineering tests to be 27% stronger than a sucker rod pin with straight thread and 15% stronger than the rod itself.
The majority of sucker rod fractures occur in the pin. The WHITWORTH THREAD practically eliminates pin or coupling fractures because the deep cut thread does not come to a sharp point but utilizes the strength-principle of the Arch Curve.
D & B special analysis Sucker Rod Steel and highly perfected workmanship combine with design to make D & B Rods exceptionally dependable and durable.
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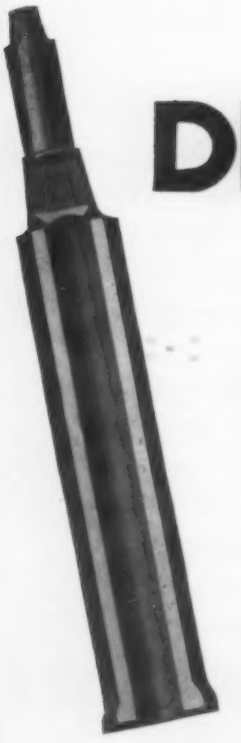
IDEAL

DRILLING BITS



IDEAL DRILLING BITS
FORGED FROM IDEAL
ELECTRIC STEEL ARE
GUARANTEED AGAINST
BREAKING OR CHECKING
WHEN DRESSED AND
TEMPERED IN ACCORDANCE
WITH FURNISHED INSTRUCTIONS

THE
NATIONAL SUPPLY
COMPANIES

Say you saw it in The OIL WEEKLY

SQUEAKS FROM THE BULL WHEEL

"I'm very sorry to hear your wife is so ill. Not dangerous, I hope."

"Thank'ee, but she be too weak now to be dangerous."

Lawyer: "And may I ask why you want a divorce?"

Fair Client (astonished): "Certainly. It's because I'm married."

Mrs. Gustum: "Can you do washing and ironing?"

New Servant (sympathetically): "Oh, yes—I used to be married and have a home of my own."

"You'll have to cut out some of this wine, woman and song business; it's killing you."

"All right, I'll never sing again."

Pa Murphy — "When that young scamp you are going with proposed to you did you tell him to see me?"

Miss Murphy: "Indeed I did, daddy; and he said he'd already seen you several times, but it didn't discourage him, he wanted to marry me just the same."

He (in front of her parents): "Here, son, take this quarter and go see the Sheik."

Buttermilk: "If it's all the same to you, I'd just as soon stay here and watch you and sister, after mamma and papa go to bed."

Chester: "Who on earth is that homely girl Jack's dancing with?"

Jim: "That's my sister."

Chester: "She sure can dance."

Lady to Ticket Agent—A round trip ticket, please.

Where to, please?

Back here, you dummy.

As the high-brow says it: "Do not calculate on your juvenile poultry before the proper process of maturation have fully materialized."

As the low-brow says it: "Don't try to get the low-down on yer cackle-berries before they have done their stuff."

As every one else says it: "Don't count your chickens before they're hatched."

An Essay on Cracked Gasoline

The cracking process is simple. The gasoline is cracked by striking a nut on the motor. It is then removed, little by little, with a nut pick.

Undoubtedly, you have met on the highway, a motor that was knocking, knocking, hammering, hammering. It was cracking the gasoline.

The process is said to have been discovered through an accident. A station manager was carrying some of the gasoline one day, dropped it and it cracked.

It had to be used, cracked or uncracked, because gasoline is peculiar in that respect. Once cracked, it cannot be glued together again like pedro club china.

The gasoline to which refence is had is, of course, an improvement on a lot of gasoline in carburetors that has suffered from our recent zero temperature and has had to be cracked with an ice pick.

Demand this gasoline and take no other.

Tell the station manager that you want to see it before it goes into the tank.

Make sure that it is cracked.

Make doubly sure that it is cracked.

Buy it through your egg dealer.

If he hasn't got any cracked on hand he can crack you some.—By a School Boy.

Jazz puts the din in dinner but takes the rest out of restaurant, and drives me from meals.

I bought my girl a pair of garters
In the five and ten.
She gave them to her mother;
That's the last I'll see of them.
—Carnegie Tech Puppet.

A fond mother was exhibiting with great pride her flapper daughter to the new rector.

"My daughter," said the mother, "could dress herself when she was but three years old."

"Well, er, do you think," asked the rector shyly "that her ability in that direction will ever return?"

A doctor's little daughter, deeply interested in radio, glanced one morning into the office where her father was testing the heart and lungs of a patient. "Getting any new stations, daddy?"

"How do you sell this cheese?"

"I often wonder myself, ma'am."

She—"When I sing I get tears in my eyes. What can I do for this?"

He—"Stuff cotton in your ears."

"How did you lose two teeth, my little man?"

"Shiftin' gears on a lollypop."

A man went into a store and asked for a comb.

"Do you want a narrow man's comb?" asked the clerk.

"No," said the customer, "I want a comb for a stout man with rubber teeth."

Husband (loaded with luggage at railway station): "I wish we'd brought the piano, dear."

Wife: "Don't try to be funny, George!"

Husband: "But I left the tickets on the piano!"

He had spoken to her on the street and she was properly insulted.

"I don't know you from Adam!" she exclaimed indignantly.

"You ought," he retorted mildly. "I'm dressed different."

George: "Why did you tell me you went to Europe every month? You never crossed the ocean."

Johnny: "You misunderstood me. I said I went over the Atlantic Monthly."

Preacher, calling on one of his flock, is met at the door by little Johnny, age 6.

Preacher: "Sonny, is your father at home?"

Sonny: "No, sir. Pop hasn't been home since last Christmas, when Mom caught Santa Claus kissin' the cook."

TYLER

Boiler Tubes

Charcoal Iron
for bad water conditions—

Lapweld Steel
for good water conditions—

For long tube life.

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Texas Stock—Harrisburg Pipe and Pipe Bending Co.
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Well Bit Tool Steel—Jar Steel

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Frequent pulling and dressing of bits increase costs of drilling. Bits made from Asco Steel last much longer than bits made of other steel. Our staff of metallurgists will assist you in solving your problems. No charge.

"The recollection of quality remains long after price is forgotten"

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NEWPORT, KY.

ASCO Steel for Oil Well Tools

Figure Low on pipe!

Figure LOW first-cost—LOW installation—LOW maintenance. Line investment and upkeep are drastically cut by engineers and purchasing agents who know Greenspon's pipe values.

ODEE Pipe for Gas Lines

carries our guarantee of utmost service, at prices that save you ⅓ or more. Furnished in double joints, it saves approximately 50% in welding and installation cost.

TERMS TO SUIT: With a reasonable down payment, the line can be paid for out of income, in place of full cash payment out of capital.

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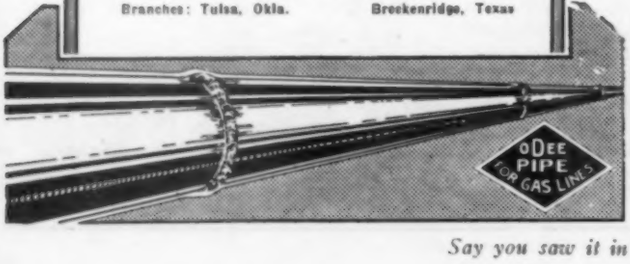
Branches: Tulsa, Okla. Breckenridge, Texas



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Economy in drilling depends upon getting the proper grade of carbon at its honest value. You can always depend upon Patrick grading. This reputation for Reliability is our greatest asset and we protect it jealously.

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GUIDE FOR PURCHASERS

A classified directory of all products used in the production of oil together with names of recognized supply dealers and manufacturers from whom they may be purchased. The concerns appearing in the Guide are regular advertisers in The OIL WEEKLY and further information including addresses can be secured by referring to their advertisements. *Alphabetical Advertisers Index on page 22.*

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Continental Supply Company
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Hope Engineering & Supply Co.
Southern Engine & Pump Co.
Waukesha Motor Co.

Air Lift Pumping Equipment—
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See Oil Field Supplies and Tanks

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Sargent Engineering Corp.

Sucker Rod Sockets—
Baird Supply Co.
Brown Welding & Machine Co.
Continental Supply Company
The Cunningham Co.
Federal Supply Company
Shaffer Specialty Co.
Western Supply Co.

Sucker Rods—
Axelson Machine Co.
Continental Supply Company
Columbus Sucker Rod Co.
D & B Pump & Supply Co.
Dunn Mfg. Co.
Frick-Reid Supply Co.
S. M. Jones Co.
The National Supply Co.
Kansas City Bolt & Nut Co.
Oil Well Supply Co.
J. P. Ratigan
Republic Supply Co.

Swabs—
The Cunningham Co.
Shaffer Specialty Co.
Simplex Equipment Company

Swing Joints—
General Machine Works
Westcott & Greis

Tanks—
Butler Mfg. Co.
The Brownell Co.
Maloney Tank Co.
M & V Tank Co.
Petroleum Iron Works Co., The
United Iron Works
Wyatt Metal & Boiler Works

Tank Deadwood—
Robertson-McDonald Lumber Co.

Tank Equipment—
Westcott & Greis

Temper Screws—
Burns Tool Co.

Thermometers—
Fort Worth Laboratories

Timbers—
Robertson-McDonald Lumber Co.

Tongs—
Bridgeport Machine Co.
Continental Supply Company
Dunn Mfg. Co.
Gulberson Corporation
Howard Smith Company
LeBus Rotary Tool Works
J. H. Williams & Co.
Wilson & Willard Mfg. Co.

Tool Joints—
Baash-Ross Tool Co.
Bridgeport Machine Co.
Continental Supply Company
Emsco Steel Products Co.
Hughes Tool Co.
Peden Iron & Steel Company
Regan Forge & Engineering Co.
Republic Supply Co.

Tools (Fishing and Drilling)—
Acme Fishing Tool Co.
Bridgeport Machine Co.
Brown Welding & Machine Co.
Continental Supply Company
Frick-Reid Supply Co.
Houston Engineers, Inc.
Hughes Tool Co.
International Supply Co.
Oil Well Supply Co.
Peden Iron & Steel Co.
Regan Forge & Engineering Co.
Republic Supply Co.
Spang & Co.
Star Drilling Machine Co.
Sullivan Machinery Co.

Toothless Slips—
LeBus Rotary Tool Works

Tractor Winch—
C. F. Camp Co.
Rock Island Plow Co.

Traveling Blocks—
Baash-Ross Tool Co.
Continental Supply Company
Lufkin Foundry & Machine Co.
Regan Forge & Engineering Co.

Tret-O-Lite—
W. S. Barnickel & Co.

Trucks—
Wichita Falls Motor Co.

Tubing Catcher—
Dunn Mfg. Co.
Gulberson Corporation

Tubing Lines—
Continental Supply Company

Tubing Protectors—
Mexia Planing Mill Co.

Tubing—
Continental Supply Company
Central Tube Co.
National Tube Co.
Republic Supply Co.
Reading Iron Co.
South Chester Tube Company

Underreamers—
Bridgeport Machine Co.
Wilson & Willard Mfg. Co.

Vacuum Pumps—
Sullivan Machinery Co.

Valves—
Continental Supply Company
Darling Valve & Mfg. Co.
The Charles N. Hough Mfg. Co.
Ludlow Valve Mfg. Co.
The Lunkenheimer Company
Metric Metal Works
Norris Bros.
Northrup Equipment Company
Smith Separator Co.
Southern Brass Mfg. & Plating Company
Peden Iron & Steel Company
Westcott Valve Mfg. Co.

Valves, Gate—
The Lunkenheimer Company

Valves and Fittings—
Continental Supply Company
Darling Valve & Mfg. Co.
D & B Pump & Supply Co.
Hercules Supply Co.
Jarecki Mfg. Co.
Kerotest Mfg. Company
Ludlow Valve Mfg. Co.
Lufkin Foundry & Machine Co.
The Lunkenheimer Company
The National Supply Cos.
Peden Iron & Steel Company
Republic Supply Co.
United Iron Works

Vents—
Westcott & Greis
Oil Conservation Engineering Co.

Walking Beams—
International Derrick & Equipment Co.
Lee C. Moore & Co., Inc.

Well Shooters—
Eastern Torpedo of Ohio Co.

Working Barrels—
Axelson Machine Co.
Continental Supply Co.
D & B Pump & Supply Co.
Howard Smith Company
Northrup Equipment Company
Peden Iron & Steel Company
Republic Supply Co.
The Charles N. Hough Mfg. Co.
Southern Brass Mfg. & Plating Company

Water Gauges—
Metric Metal Works
J. E. Shaffer Company
Smith Separator Co.

Water Cans—
H. P. Gott Mfg. Co.

Water Softening Compounds—
Ward Chemical Co.

Wire Rope—
American Cable Co.
Bridgeport Machine Co.
Continental Supply Company
Hercules Supply Co.
International Supply Co.
The Longhart Supply Company
Peden Iron & Steel Company
Regan Forge & Engineering Co.
Republic Supply Co.
The National Supply Cos.
Wickwire Spencer Steel Corp.
Williamsport Wire Rope Co.

Wire Rope Fittings—
American Cable Co.

Wire Rope Slings—
American Cable Co.

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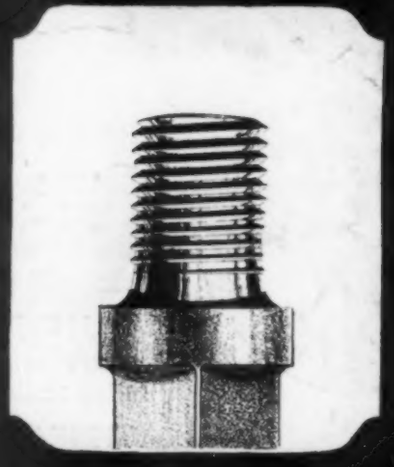

AXELSON SUCKER RODS

AXELSON MACHINE COMPANY

General Office and Western Factory: Corner Boyle Ave. and Randolph St., Los Angeles, Calif., P. O. Box 337

Eastern Sucker Rod Factory: 3844 Walsh St., St. Louis, Mo.

Mid-Continent Office: 1023 Kennedy Building, Tulsa, Oklahoma

Mid-Continent Distributors: Frick-Reid Supply Co.

Eastern Distributors: Frick & Lindsay Co.

Casper, Wyoming Office: with Frick-Reid Supply Co.

New York City Office: 30 Church Street